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ESSAYS, MONOGRAPHS, AND CASES.

Remarks on Deformities from Burns; with a Successful Operation on a formidable case. By ALEXANDER B. MOTT, M.D., Surgeon to St. Vincent's Hospital, and the Jew's Hospital, New York, &c.

Burns have long been known to produce some of the most frightful disfigurements that occur in Surgery. Pott, Ambrose Paré, and other early surgeons, record the difficulties that occurred from this source in their days; Roux and Sir Astley Cooper allude to them in more recent times. Mr. Cleghorn, of Edinburgh, a celebrated Scotch brewer, who, in consequence of the frequency of such accidents among his workmen, treated scalds with an ability not inferior to any of the Faculty, as Abernethy himself sarcastically admitted, declared that the contraction arising from the cicatrix was the only calamity beyond his reach; and every surgeon of experience must, necessarily, have met with them as among the most troublesome of the difficulties he has to encounter.

Many of them have occurred to me, but I do not recollect one more striking than that which the case illustrated in the accompanying plate presents. The patient, a young man

named Patrick Lavel, aged twenty-three, applied to me in the latter part of the month of December, 1850, for the purpose of obtaining relief from the effects of a burn which he had sustained in his youth. A glance at the plate will explain his condition. In early life he had been subject to one of the frequent accidents arising from fire, and, as usual in such cases, contraction had subsequently ensued to a most distressing extent. A cicatrix occupied the entire front part of the neck and chin, and extended from ear to ear. It was the result of an injury which he had received by falling into a stove when only five years old, and the consequences had ever since been of the most painful as well as disagreeable description. The appearance of the face was distorted in the highest degree; the chin was drawn down to within half an inch of the upper portion of the sternum, and (so firm was the contraction) it was impossible for him to raise it or close his lips. The inconveniences he experienced, as well as the constant exposure of the mouth, prompted him to apply to me for relief; and it will be obvious at a glance how great the necessity was, as the man, though neither unintelligent nor beyond the prime of youth, had in his aspect all the marks of imbecility and age.

Having made a careful examination of the case, I arrived at the conclusion that it could be relieved by an operation, and so informed the patient. I at the same time warned him of the danger incidental to all plastic operations—namely, the hazard of sloughing, and leaving the parts in the same condition as before. In my advice and explanation he fully concurred, and urged me to undertake whatever course I saw fit. Thus allowed free scope, I reflected on the means by which the operation could be most effectually performed, and after due consideration, there appeared to me but one mode by which it could be successfully accomplished. From the nature of the cicatrix, which extended from the underlip far down upon the chest and over the clavicles, I could discern no other chance for success than by taking sound material from over the region of the scapulas; and, as at this period there was a prevalence of erysipelas in New York, it was necessary to undertake so extensive a cutting with precaution. Several patients on whom I had recently operated had been attacked by it, and

fearing a similar result in his case, I urged upon him the expediency of postponing the operation for a few weeks. This he did; and when there was no longer any probability of the apprehended affection making its appearance in the flaps by which I proposed to replace the parts that had been destroyed, I at the end of a month resolved to operate.

The arrangements having been duly made, on the 27th of January, 1851, I proceeded to carry my designs into effect. The operation was performed in the following manner:—After throwing the patient into a state of insensibility by means of chloroform, I made an incision through the middle of the cicatrix, extending from half an inch below the lobe of the right ear to a corresponding point on the left side of the neck, and carefully divided the tissues, which were firm and dense, until the sterno-cleido-mastoid muscles were brought into view. The patient being fully under the influence of the anæsthetic, I was enabled the more readily to make a gradual tension of the neck, and to divide the resisting tissues; but I found it necessary to cut through the sterno-cleido-mastoid muscles before I could get the head into its proper position. This accomplished, the sheaths of the carotid arteries and deep jugular veins were plainly to be seen. Due caution was of course taken to avoid them, and the space before me to be filled up was now distinctly visible. It was extensive, measuring no less than eleven inches in length, by five and three-quarters in breadth—and, as I had anticipated, it would have been folly to have attempted filling it up with one flap. I accordingly continued my incision behind the ear and carried it down about six inches and a half in a line with the upper edge of the scapula. Thence I extended it downwards and backwards across that bone a little more than six inches, and up to the posterior part of the neck, leaving a base of about three inches to the flap, with a view of providing for an adequate and free circulation. The flap was next dissected upwards and left as thick as possible, for the purpose of being brought round to the anterior part of the neck; and, to relieve the twist as far as practicable, the anterior incision was continued upward to the posterior of the ear. This effected, a similar flap was taken from the opposite side, and brought to join the other on the mesial line. I had taken

the precaution to have an adequate extent of the new material and the space was consequently filled up without tension. Nothing now remained to complete the operation but to bring the extremities of the flaps together. This was effected by numerous interrupted sutures; and the edges were afterwards in like manner attached to those of the upper and lower portions of the wound, as indicated by the dotted lines in the figure.

The dressings consisted of short pieces of adhesive plaster between the sutures, and narrow pieces of lint spread with simple cerate over the edges of the wound. The object of this was to avoid any pressure which might obstruct the circulation; and, with a similar view, a piece of lint secured by a bandage was lightly applied around the neck, over the whole. The wounds on the back were dressed with lint, and the edges drawn together as much as possible.

The patient quickly rallied from the effects of chloroform, and, to avoid the unpleasant consequences arising from its use (that is, obstinate vomiting), which I feared might supervene and interfere with union by the first intention throughout the wound—thus defeating the aim of the operation—I cautioned him, and gave strict orders to his attendants that he should have no kind of nourishment or drink for several hours. This is a course that I invariably adopt after operations in which chloroform has been administered, and I moreover take the precaution of not allowing the patient to eat for at least four hours previously. No vomiting ensued, and but little nausea supervened; the latter being arrested by the application of a sinapism to the epigastric region.

On the evening of the operation I revisited the patient at 9 P. M., and directed twenty drops of Majendie's solution of morphine to be given, and repeated if necessary during the night.

Jan'y 28th. The patient had slept well, and the nausea had disappeared. I allowed him light nourishment, and visited him daily until the 31st, when the wound was dressed for the first time. In consequence of having previously taken the precaution to spread the lint with simple cerate, I found, as anticipated, that the original dressings had not adhered so closely as

they generally do ; and had the gratification of discovering every appearance of union by adhesion along the upper and lower edges of the flaps. The only portion which evinced a disposition to slough was the end of each of these as they united at the mesial line of the neck. Here a discoloration had ensued to the extent of a finger's breadth ; but the effect was readily obviated by various stimulating applications which I used for the purpose of arresting its progress. In the course of a few days the slough detached itself, and I then drew up the sides of the wound as closely as possible by means of adhesive straps. It healed kindly, and the patient was able to move about his room freely in the course of two weeks. No suppuration followed under the flaps ; and the wounds of the back granulated rapidly and healed. During the month of March, the patient returned to his avocation much relieved, and entirely recovered from the effects of the operation. Subsequently I saw him from time to time, with the view of remedying the slight inconvenience experienced from a small hard cicatrix which had formed mesially at the end of each flap where the sloughing took place, and, on the 12th of April, I made an incision on each side of this excrescence, and removed it all. The edges of the wound were then brought together ; and, having allowed myself what might appear a superfluous extent of material in the first operation, I was now the more thoroughly convinced of the advantage arising from this course, as it enabled me to bring the soft integuments together without making any tension around the neck.

This subsequent incision healed kindly under ordinary treatment, and the patient returned to his usual occupation in the course of ten or twelve days, without the slightest necessity for again requiring my aid.

I have several times seen him since the last operation, and until within a year he has never been entirely beyond my view. He is so now, only because he has not the smallest occasion for surgical aid ; having been completely relieved by this plastic operation, and again enabled to hold his head erect—an object of considerable importance for a man of his trade, which is that of a carpenter. He is able to close his mouth without difficulty, and his personal appearance is much

improved. On meeting him casually in the street, no one would ever surmise that he had been the subject of an operation so formidable. He is now free and unconstrained in his movements, and has all the appearance of being a vigorous and intelligent man.

The drawing No. 2, was taken from life about a year after the first operation, and any traces of the incisions have since more effectually disappeared. I am not aware of any operation so extensive as this having ever been performed for the purpose of remedying a similar deformity, and at the time I operated on this patient I had not heard of a similar case having been recorded. Some two years after, my attention was drawn to one, reported in the "American Journal of Medical Sciences," Vol. IV, by Dr. Mütter, of Philadelphia, but it was on a much smaller scale; and any instances we find on record in the usual surgical authorities are still more limited. It is astonishing indeed how little has been written on such an important point in surgery, and, still more so, how little has been attempted. Dr. Mütter's is the only other case in this country that falls within my recollection; and on the opposite side of the Atlantic still less appears to have been accomplished. The late Mr. Henry Earle, of St. Bartholomew's Hospital, London, is seemingly the only British practitioner of note, in any degree identified with the subject; and even this accomplished gentleman, though the son of the former Sergeant Surgeon of the English court, apparently had very imperfect notions on the matter.

From the fifth volume of the Medico-Chirurgical Transactions (p. 96 et seq.), it will be perceived that he merely proposed cutting away the whole of the cicatrix, and bringing the edges of the skin towards each other as far as possible, in a transverse direction, by means of slips of adhesive plaster. A moment's consideration will suffice to show how utterly inadequate such a procedure must have been. The contraction, on healing of the wound, must either have been still greater than before; or, as in the instance which he gives of attempting thus to treat an injury of the forearm, the incision must have remained open so long before being finally closed by the tedious process of granulation, as to be equally painful and inconvenient to the

sufferer. Indeed, it was very properly objected in England at the time, that had not the patient been a child only six years of age, where future growth might be anticipated to afford an adequate supply of new material, such an operation could never have been attempted with the least probability of success; and the forcible subduction of the power of the flexor muscles, accomplished in this case by the protracted application of a splint to the posterior of the arm, must have produced a degree of inconvenience and suffering to which no adult could be expected to submit.

In conclusion, I would add that it is perfectly possible other cases may have occurred without falling under my notice; and I would at the same time express a hope that the attention of the profession may be more extensively directed to this subject; as, from the brief detail of the case I have just recorded, it will be obvious at a glance, how much of human pain and of human deformity may be relieved by a comparatively simple and in no degree dangerous operation.

209 TENTH STREET, June, 1856.

Cephalic Version. By H. GATCH CAREY, M.D., Dayton, Ohio.
Read before the Montgomery Co. Medical Society, at its July session.

History and General Considerations.—Cephalic version was an operation generally resorted to by physicians in cases of transverse positions of the foetus in utero, prior to the middle of the sixteenth century. To bring the vertex back again over the pelvic arch, appears to have been the only manual process practised by them for relieving the mother of her offspring in the above accidents. The idea was so generally entertained, and its success and practicability so uniformly conceded, that some of the primitive accoucheurs went so far as to recommend and even practice turning by the head, in cases of breech and foot presentations. Although known to them, primitive accoucheurs rarely attempted podalic or cephalic version, especially if the child evinced signs of vitality. The teachings and labors of Ambrose Paré, however, effected a change in

professional sentiment upon this subject. He strongly advocated these latter operations in preference to cephalic version, and such was his influence, that the latter fell almost wholly into disuse. For several generations it was rarely performed, and when mention was made of it by teachers and authors, terms of derision and opprobrium were applied to the operation. At a later period, Smellie, Mauriceau, La Motte, Roux, Leroy, and others, alluded to the operation more respectfully, and gave the circumstances in which it was applicable.

The teachings of this latter class of physicians, however, upon this subject, were only exceptions to the general rule in their day; and it remained for Hamant, of Strasburgh, to revive the practice and restore it to a recognized position among the most favorable operations for relieving transverse positions of the fœtus in utero. His precepts and example have been followed by quite a number of French, German, and American practitioners, and thus bids fair to rival the most successful manœuvres for accidents requiring the manual interposition of the accoucheur. Modern authority, however, still preponderates against the operation.

"It may be that those old practitioners of the days of Queen Elizabeth, may have succeeded by pushing up the presenting shoulder, and getting the head at last to come to the strait again, but such an event appears, in any case, most improbable."—*Meigs*.

"The practitioner will experience great difficulty, and most likely fail, in attempting to bring down the head in a favorable position, when the shoulder presents."—*Huston*.

"Cephalic version has but few advocates at the present day, and is confessedly applicable to such a limited number of cases, that it is scarcely worthy of our formal consideration. For this reason, and because I have no experience in it, I shall confine myself to podalic version."—*Miller*.

"The cases are few in which it is proper or possible, to bring down the head of the child to the os uteri, or, in other words, in which we can and could perform what is termed *cephalic turning* or version."—*Simpson*.

"There are three species of version which have been recom-

mended, and all perhaps enjoy their peculiar advantages. They are cephalic, pelvic, and podalic version. Of these, that of raising the shoulder and bringing down the head, would be the safest to the child, because there would then be little chance of pressure on the funis umbilicalis; and it is that pressure which usually destroys the child when extracted by the breech or feet; but, although safest to the child, it is the most dangerous to the mother, as well as most difficult to the operator. The form, size, and slippery nature of the cranium, all combine to produce this difficulty."—*Ramsbotham*.

"If the patient be known usually to have a short labor—if the pain be brisk, the os uteri dilated, or in a relaxed and easily dilatable state, the liquor amnii retained, and the head movable—then the head may, without difficulty or much irritation, be placed in a proper position, with a fair and reasonable chance of success."—*Burns*.

Velpeau, who gives adhesion to cephalic version, answers the above objections in the following language:—1st, It is not always difficult to seize the head and exert considerable force upon it; 2d, If the waters have not long been discharged, one may often without difficulty, seize the vertex and bring it to the centre of the brim, however far it may have been distant; 3d, That delivering by the breech is far from being a simple and safe operation; as regards the child, it is less so than cephalic version, even if the forceps should afterwards be applied.

Few propositions are better established, than the complete control which the accoucheur has over the child, prior to the rupture of the membranes. In this condition, Churchill compares version to the turning of a child in a bucket of water; and Simpson says, there is so much room while the child still floats in the liquor amnii, that if you can seize firmly almost any part of one or both the lower extremities with the introduced hand, you will readily effect your purpose. This buoyant condition of the child, would lead one to suppose, that an accoucheur at all familiar with obstetrical manipulations, might readily cause the vertex to take any position, which his inclinations, or the necessities of the case should chance to demand.

The fathers in this art, were, to a limited extent at least, able to accomplish this end, through the parities of the abdomen of the mother ; and there are few, I apprehend, of the present generation of physicians, who would willingly acknowledge the superiority of obstetricians living in the fifteenth century, over them, even in this particular. The practicability of cephalic version no longer admits of doubt, and the only question arising in the consideration of the subject, is the comparative immunity which it secures to the child and mother, from danger, when contrasted with pelvic and podalic version.

In medicine, as in most other relations of life, extremes, rather than medium positions, are quite prone to be taken. This is true to such an extent, that theories and speculations are often made to take the place of facts and sound deductions. Scarcely a new article of the *materia medica*, or instrument in surgery, is introduced to the consideration of the profession, that will not find a host of enthusiastic advocates, ready to proclaim its untold virtues. These innovations are often prejudicial to the interests of science and humanity, by substituting the unknown for the known ; by neglecting the use of those means which are efficient and successful, for those that are inert, if not positively prejudicial. However much of this may be true concerning the method urged upon the profession by Paré and his pupil, Guillemeau, for the relief of uterine accidents, I will not stop here to demonstrate ; but am of the opinion that the almost total exclusion of cephalic version from the lying-in chamber for two and a quarter centuries, has resulted in the loss to society of many a valuable life, that otherwise might have been saved.

Mal-position of the cephalic extremity of the fœtus requiring the interposition of the accoucheur for its safe delivery, may vary from a slight deviation of the vertex, to an entire displacement of this part, by some other portion of the body. Many distinct points of the child may present during the progress of the same case. Churchill, on one occasion, found the vertex, shoulder, and thorax, to offer at the superior strait, in as many different examinations, made at brief intervals. These changes, of course, occur thus readily, only, before the rupture of the membranes. The shoulder and arm are, by far, the most

frequent to present, when the head deviates from its normal position at the brim. They may, indeed, be the first to offer, but more generally the vertex, in a distorted or vicious position, presents, and failing to gain a ready admission, departs therefrom, leaving the outlet free to engage any other part that may, by the contractions of the womb, be forced in that direction. So long as the fœtus remains surrounded with the liquor amnii, the facility which this liquid furnishes for motion, exposes the child to deviations from a normal condition, in reference to the adjacent parts of the mother, by insignificant causes. Partial and irregular contractions of the uterus, are doubtless prolific sources of these abnormal positions of the head.

The causes of transverse positions of the fœtus at the superior strait, are by no means uniformly, if at all, under the control of the practitioner. Intimation of their existence are rarely ever furnished, prior to the commencement of labor. After pains appear, and the os begins to dilate, the attentive accoucheur will rarely fail to determine the position of the child. If a shoulder, arm, or oblique position of the head offer, they soon will be forced within the range of the finger; and if not, the very absence of some portion of the child at the superior strait, would arouse suspicion; and if this condition be joined to a projection of the fœtal membranes through the os tincæ, like the finger of a glove, rather than the oval of an egg, would be strong confirmation of a transverse position of the child, requiring manual interposition. This condition puts the life of both mother and child in extreme jeopardy, and requires to be promptly met.

Methods of relieving transverse positions of the fœtus in utero.
—Three expedients are furnished—one by nature and two by art. They are version, evolution, and extraction by mutilation. The latter is only applicable to those cases in which the death of the fœtus is a foregone conclusion, and when speedy delivery is demanded, and the former methods are impracticable. At best, it is a revolting procedure, and should only be resorted to when all other means have failed to accomplish the urgent purposes indicated. Immediate danger to the mother

is thus generally obviated; but it furnishes no safe guarantee against ultimate destruction, from inflammatory action thereby superinduced.

Evolution is applicable to a more limited number of cases than the preceding; though, under favorable circumstances, it may result favorably both to mother and child. The operation involves great labor and protracted suffering to the mother. The profession is divided upon the minute details of this process. Denman first brought the operation prominently before the profession, and in his introduction to midwifery, furnishes us with an illustration of his idea of the process in the following language:—"I presume that after the long continued action of the uterus, the body of the child is brought into such a compacted state, as to receive the full force of every returning pain. The body, in its doubled state, being too large to pass through the pelvis, and the uterus pressing upon its inferior extremities, which are the only parts capable of being moved, they are forced gradually lower, making room, as they are pressed down, for the reception of some other part into the cavity of the pelvis, which they have evacuated, till the body, turning as it were upon its own axis, the breech of the child is expelled as in an original presentation of that part." He further adds, "premature or very small children, have often been expelled in a doubled state, when the pelvis was well formed, or rather more capacious than ordinary; but this is a very different state from that which we are now describing." This particular process received from its author the name of "spontaneous evolution," and still is retained in obstetrical nomenclature for historical purposes.

For many years, the views of Denman were received generally by the profession, as being correct; but in 1811, Dr. Douglas, of Dublin, demonstrated the fallacy of the above doctrine. "It is incompatible," he observes, "with the received notions of uterine action, to suppose that the uterus, when contracting so powerfully as to force down that part of the child which was at its fundus, could, at the same moment, form a vacuum, into which another portion, already low down in the pelvis, should recede." He claimed that the part first presenting remained fixed, and the body of the child, doubling

upon itself, was inch by inch forced into the cavity of the pelvis, and finally delivered in this flexed condition. To this operation he applied the term "spontaneous expulsion.*"

But a very limited number of cases of shoulder presentations can possibly terminate either by spontaneous evolution or expulsion, as the case may be, with safety to the mother and child. The diameters of the pelvis must be capacious, indeed, if a mature, well developed foetus can be forced clear through the straits, with its body doubled upon itself. Such results are literally impossible in a large majority of instances, and can only occur in immature births, and cases of deficient or imperfectly developed children. The unassisted powers of the uterus are often taxed to the utmost point of ability and endurance, to expel the foetus when its vertex or breech present their long diameters to the corresponding ones of the pelvic outlet. In all such cases, should the shoulder or arm be the presenting part, they must be removed by some artificial means, and the presentation changed for a more favorable one, before delivery could by any possibility take place.

Danger to child and mother from pelvic and podalic version.—Already we have incidentally learned that Velpeau considers delivery by the breech, as far from a simple and safe operation; being even more hazardous to the child, than cephalic version and the forceps jointly. Upon the testimony of this eminent authority, I might here safely rest the case; but prefer to present the subject somewhat more in detail.

Under the most favorable circumstances, death takes place in one-third of all the children who are delivered by the feet after turning. This mortality results from the very nature of the operation, and depends in part upon violence done the deli-

* Not long since, I witnessed a case of this character in my own practice. I arrived at the bedside of the patient after the membrane had burst, and found an arm occupying the vagina. The propulsive action of the uterus was strong, the pelvis well formed, and with each returning pain, the child advanced in the direction of the vulva of the mother. The shoulder soon emerged from the superior commissure, and the clavicle applied itself closely to the arch of the pubis, serving as it were a pivot upon which the body of the child turned. The chest, loins, and pelvis soon emerged *scritim* from the os externum, and the head finally came away, as though the breech or feet had originally presented

cate structures of the fœtus, and in part upon mechanical obstruction, offered to the free return of the fetal blood, to the right side of the heart, by pressure applied to the funis. These are unavoidable, and therefore do not admit of a remedy. With perhaps a little additional dexterity in favor of the present generation of physicians, Ambrose Paré proved himself quite, if not absolutely, as successful in turning by the feet, as they have been. The impediments to improvement are mechanical, and must remain insurmountable.

Violence done the delicate structures of the fœtus in turning, is one cause of the fatality. If the waters have long been evacuated, the uterus will be found contracted, with more or less firmness around the projecting limbs and unequal surfaces of the child. To gain possession of the knees or feet in presentations of the upper half of the child's body, the hand of the manipulator must be forcibly passed between the yielding infant and the rigid womb. The injury thus done may be considerable in amount; but it is trivial when contrasted with the violence done the spine and nervous system generally, by compelling the head to traverse half a circle under the restraint of the contracting uterus, by means of force applied to the feet or pelvic extremity of the vertebral column. It is true, that complete flexion of the spine, as in spontaneous expulsion, is compatible with the life of the subject; yet this is not one of Nature's favorite methods of bringing new beings into this world. The most fruitful cause of the large mortality attending podalic version, however, is the obstruction afforded to the free circulation of blood in the funis umbilicalis. This may take place from the cord being put upon the stretch, by an accidental loop chancing to be around an extremity, or the neck of the child. Should it escape this accident, as soon as the inferior half of the body passes the superior strait of the mother, the umbilical cord is exposed to compression between the straits of the pelvis and body of the child. In 565 cases carefully collected by Churchill, of turning, in which the result of operation to the child was specified, 187 children were lost, or one in three.

These objections to version by the feet—though less favorable to the child than pelvic version, and generally recommend-

ed in preference to the latter—only contemplate the actual risk to the life of the fœtus. The mother also comes in for a large share of superadded suffering and danger. The hand of the operator is compelled to pass the os uteri, and traverse the entire body to the fundus of the womb, before possession of the feet can be gained. When the maternal organ has for some time been evacuated of its watery contents, and has moulded its parieties to the unequal surfaces of the child, it requires no small degree of force, to affect the desired object. Sufficient injury is thus often inflicted upon the surface of the uterus, to superinduce inflammation of its substance, resulting ultimately in death to the subject; or, the increased stimulation occasioned by the presence of the hand and arm rudely thrust into its cavity, may so excite and heighten action, as to result in a rupture of the womb, and death of the mother. From the statistical tables of Churchill, we are informed that out of 192 cases, where the fate of the mother was specified, 12 were lost—or one in sixteen.

Cephalic version is applicable to all those cases of deviations of the vertex, in which a reasonable hope is entertained of spontaneous delivery taking place, safely to the mother, if the head were the permanent presenting part. In transverse positions of the child, when the vertex is nearer the superior strait than the pelvic extremity, I think the operation commends itself to the careful consideration of the practitioner. It consists in carrying the presenting part—shoulder, arm, chest, or any other portion of the fœtus that may offer—upwards and in an opposite direction to that at which the head of the child may be situated, and as the hand is withdrawn, it is made to grasp the vertex and place it in the most favorable position for delivery.

The advantages of cephalic over podalic version are simple and readily expressed. *It is safer to the child.* All the circumstances which complicate and render podalic version dangerous to the infant, are avoided by bringing back the head to its normal position at the superior strait. Violence to its person and shock to the nervous system of the fœtus, are obviated. So, too, of the fatal compression of the umbilical cord, by the detained head in the pelvic cavity of the mother. Secu-

erty to life should be paramount to all other considerations with the physician ; and if cephalic version can be performed, the above consideration alone should nerve his arm and inspire him with energy and perseverance to accomplish the delivery of the fœtus, in these cases, by the head. There have not been to my knowledge a sufficient number of cases collected by any person, of the accidents under consideration, to serve as a correct basis of comparison between the mortality of podalic and cephalic version. The results of the former we are familiar with. Of the latter, we can only reason, or judge from analogy and the recorded experience of those who have enjoyed extensive experience in this department of obstetrical practice. Ramsbotham tells us, that in transverse position of the fœtus, elevating the presenting part and bringing down the head again, is safer to the child than pelvic version. Dubois recommends the operation in some circumstances which he specifies. Smellie advises it in certain positions of the child. Leroy prefers it, generally, to version by the feet. Velpeau declares that it is less hazardous to the child, than turning by the feet with the aid of the forceps. Jöerg, among many others, insists that the head shall be brought back again to its place, whenever it is nearer the os than are the feet.

Cephalic version is eminently practicable.—If the accoucheur has the power of selecting his time for changing transverse positions of the fœtus in utero, there certainly is not the least excuse for him, in not placing the vertex in any position which his inclinations or the necessities of the case demand. The proper time for version, either by the head or feet, should be immediately after the rupture of the membranes.

So long as the child is invested with the membranes containing the amniotic fluid, so long is it under the most perfect control of the skilful manipulator. This axiom requires no arguments for its demonstration. If then, in this condition, a transverse position of the fœtus is discovered, and the passages are lubricated with the natural secretion, and dilated or dilatable, the practitioner is highly reprehensible in not attempting, at least, to restore the head to its original position. The barriers to his success are trivial, and when he has accomplished

his purpose he guarantees to the child one additional chance out of every three, for living, over version by the feet.

If the practitioner does not chance to see the case until the waters are evacuated, and the uterus still is disposed to yield kindly, under gentle pressure made upon the child, his conduct in reference to the case should be the same as in the preceding, where he had command from the beginning. If the child admits of tolerable motion under gentle manipulations, he may anticipate favorable results for his patient and the fruit of her womb.

But unfortunately for humanity, the accoucheur cannot always be present during the progress of parturition, to restore the fœtus to its normal position, as soon as deviations occur. Frequently, hours and days elapse between the prolapsus and the arrival of one competent to relieve the mother from her perilous and truly painful condition. The uterus has firmly, and perhaps rigidly, applied itself over the projecting limbs and inequalities of the child, like a mould. When this condition of the maternal organ obtains, with a shoulder firmly imbedded in the pelvic cavity, the chances of safety to the child become small indeed, under any treatment. The very act of removing the prolapsed part from its impacted condition, in order to give room for the passage of the hand of the manipulator, may require sufficient force to destroy the remaining spark of vitality which animates the new being. When such a state of affairs obtains, if the child is at all under the control of the practitioner, cephalic version affords still the only remaining hope of safety to the fœtus; and if it can be performed successfully, will endanger the integrity of the womb less than pelvic version; though the forceps have to be applied subsequently, to complete the delivery.

The preliminary steps of podalic and cephalic version are, in all cases, the same, viz: clearing the pelvic cavity of the presenting part, to give room for one or the other extremities of the trunk, by means of which delivery alone can be accomplished. A gentle continuation of this process, if conducted in the proper direction, will unavoidably bring the head free to engage in the superior strait. It is not at all necessary that the hand and arm should, to perform the work successfully,

be both thrust into the cavity of the uterus. The introduction of the former will accomplish all that can be expected in this process. In this respect, much is gained in favor of cephalic version, as the womb, which has already been goaded and lashed into furious action, by the unyielding nature of the body upon which it has been expending its forces, is saved the additional stimulus of the hand and arm, forced like a wedge between the child and its rigid parietes, to the fundus, in quest of the feet. Herein, also, is the great danger of rupturing the walls of the uterus. In cephalic version, the child is compelled to traverse but a small portion of an arc; while in podalic the head is made to describe one-half and perhaps three-fourths of a circle.

Where the presenting part of the child is immovably impacted in the pelvic straits, as occasionally is the case, the only remedy left for the safety of the mother, is mutilation of the child, either by eviscerating the thorax and abdomen, or by amputation of the head and delivering the child in separate sections.

Objections to cephalic version.—Dr. Simpson, in his recent obstetrical works, assures the reader that the fœtus in utero, with the membranes still entire, is under the most perfect control of the accoucheur; and yet, notwithstanding the mobility of the child, and the facility with which it may be changed from one position to another, he very gravely tells us upon the same page—559 *Op. cit.*—that the cases are few in which it is proper and possible to bring down the head of the child to the os uteri; or, in other words, in which we can, and should, perform what is termed, cephalic version or turning. To me such advice as the above bears upon its face an inconsistency truly glaring and irreconcilable. The child floats, and is freely subject to the manipulations of the practitioner; and yet, with the mortality of one in every three cases delivered by turning by the feet, he recommends it in all instances of transverse positions of the child. He condemns a practice, which his own statements unequivocally concede to be eminently practicable.

The objections urged by Ramsbotham to cephalic version, are, difficulty to the operator, and danger to the mother. The

difficulty apprehended by him, rests in grasping the head, and bringing it over the brim of the pelvis. If the outlet of the mother is cleared by raising the impacted part of the child in a perpendicular direction, I am willing to grant the embarrassment which the operator would encounter, from a disposition of the originally prolapsed part, again to resume its place at the superior strait. But should it once occur to the practitioner, that the head is attached to the trunk through the intervention of the neck; and that the operation of pushing the part which offers, in an opposite direction from that in which the head is located, would unavoidably drag the latter directly across the upper boundary of the pelvic outlet,—he would have little trouble. I apprehend, when this is accomplished, in grasping the cranium and adjusting it to the straits, though “the form, size, and slippery nature” of it conspire to the contrary.

The risk which cephalic version imposes upon the mother, apprehended by the above author, consists in “serious danger of injury to the vagina and uterus, by the repeated efforts which will be required to accomplish the operation.” The introduction of the hand through the vagina into the os uteri, carrying before it a presenting shoulder, while the parietes of the womb only adapt themselves loosely to the irregular surfaces of the child, certainly does not necessarily involve any serious danger to the soft parts of the mother, nor require unusual skill in the obstetrician. Then, why we should apprehend laceration of the vagina, or rupture of the uterus, when we contrast with this operation the force that is often requisite to perform podalic version, is beyond my ken. In one case, the introduction of the hand within the os, is sufficient to accomplish our purpose; and in the other, not only the hand but the arm also, must be made to pass, and the former carried between the child and womb, up to the fundus of the organ, before possession of the feet can be gained.

With a limited experience, I perhaps should not presume to call in question the propriety of an operation so generally condemned as is cephalic version; and yet, it does appear to me, that the objections by which it has been set aside, are neither sustained by sound argument nor rational philosophy. All

admit the superiority of the operation, and especially the security which it confers upon the child, when judiciously performed ; and still most authors exclude it from the safe operations in obstetrics, on the score of *impracticability*.

In my humble judgment, in the early stages of shoulder presentation, or transverse positions of the child, when the upper half of the body presents, if the membranes are still intact, or recently ruptured, and the uterus is pliant and yielding under gentle pressure—cephalic version is eminently practicable, and less hazardous to the life and well-being of the infant and mother, than podalic version. If this be true, it certainly should be attempted in all cases of the above accidents, when circumstances warrant or demand a change in the position of the fœtus.

CASE.—With the brief details of a successful case of cephalic version which recently came under my care, I will dismiss this subject. I was summoned June 2d, by a German midwife, to see a patient in labor. I arrived, and found that eight days previously the membranes had spontaneously given away, and the waters gradually drained off ; that three and a half hours before my arrival, after a brief period of labor, a child had been expelled “doubled up.” An examination, per vaginam, disclosed the left hand and arm of a second child presenting—and both quite out of the vulva. The shoulder and trunk were occupying the superior strait, with the head resting upon the left pectineal eminence of the mother. The uterus was applied with considerable force over the body and extremities of the child. I immediately determined upon cephalic version, if the operation was practicable. After laboring for a brief space of time, in fruitless efforts to accomplish this purpose, I passed my hand in quest of the feet, and doing so, more thoroughly rid the pelvis of the impacted body of the fœtus ; and again I addressed my operations to cephalic version. I was now able to replace the head of the child across its breast, and grasping the shoulder and nape with my left hand I carried them upward and to the right side of the mother, until the vertex applied itself against the palmar surface of my wrist. I maintained this position, until the uterus again took

on action, when, on withdrawing my hand, I adjusted the vertex opposite the left pectineal eminence of the mother. The next succeeding pain completed the delivery of a mature, well-developed infant. The only attention subsequently required in the case, was the replacement of a prolapsed anus of the mother, which had come down during the strong propulsive action attending the delivery of the double birth.

Eunuchs, Circumcision, and Leprosy in the East. By Dr. J. OSCAR NOYES, late Surgeon in the Ottoman Army.

The Mussulman law distinctly interdicts all mutilations of the human body. Moslems, generally, prefer death to an amputation, or a severe surgical operation of any kind. But, notwithstanding this, the employment of Eunuchs is still retained in the East. Their use by the Asiatic monarchs dates from a remote antiquity. They were numerous in the Eastern Empire before its fall; the Eunuch Narses having been, in fact, one of the best generals of the Greeks. Wherever polygamy has existed these mutilated specimens of humanity have been employed, and probably will be as long as that institution shall have an existence.

While in Constantinople I learned some curious facts relative to Eunuchs, which were confirmed during my visit to Egypt, where they are much more common than in European or Asiatic Turkey, on account of the greater facility in procuring proper subjects. The Turkish grandees obtain their Eunuchs from Egypt, where, in fact, they are exclusively made. The trade is not so active as in former times: as many of the Turks now confine themselves to one wife, there is not so great a demand for these Argus-eyed guardians of Eastern harems. So far as I could learn, about three hundred Eunuchs are annually made in Egypt, some of whom come to occupy important posts in the Turkish and Egyptian governments. The *Kisler Aga* of the Sultan, for example, is the third man in the Ottoman Empire, having charge not only over the harem of Abdul Medjid, said to contain in all nearly two thousand females, but being also the director of the revenues of the imperial mosques and

the incomes derived from Mecca and Medina. From a singular custom of the Ottoman Court, which I am unable to explain, a private harem is kept within the walls of the seraglio for the Kisler Aga, as well as one for the chief of the white Eunuchs.

Syout and Girch, far up the Nile, are the only places in Egypt where Eunuchs are made for the Egyptian and Turkish markets. The white subjects are Circassian or Georgian boys, —the black, Abyssinians or Nubians, from six to nine years of age; the latter being brought by caravans from Sennar and Darfour. The village of *Zawry-el-Dyr*, near Syout, is the great metropolis of the trade in Eunuchs. The perpetrators of this horrid mutilation, to the shame of Christianity be it said, are Christian Copts; and as the subjects of their atrocious cruelty sell from \$75 to \$200, they drive a very lucrative business for Egypt. The mutilation—according to Clot Bey, from whom I have derived much information on this subject—is usually practised in the Autumn, that season being regarded as most favorable. In most cases the operators do not confine themselves merely to castration, as is generally supposed, but remove with a razor all the exterior organs of generation. Boiling oil is then poured upon the wound, and a short tube inserted into the remaining portion of the urethra, to prevent the closure of the same during the healing process, through which also the boy urinates. A tube is used for the latter purpose throughout life. Powdered hennah is then sprinkled upon the wound, and the sufferer buried for twenty-four hours up to his waist in the sand. Various kinds of unguents are afterwards employed. Three out of every four submitted to the operation, perish. Some efforts have of late been made to do away with this barbarous custom, but it will continue in a greater or less degree so long as polygamy shall remain the law of the East. A wealthy Turkish Pacha, wishing to make Abdul Medjid a valuable present, sent him a number of beautiful Circassian boys, who had undergone the operation I have described in Egypt. The Sultan, who is a humane and tender-hearted man, could not repress his indignation at the act, and directed that it should never be attempted again.

The Eunuch can ordinarily be distinguished by his exterior physiognomy. He is usually plethoric, beardless, and has a

feminine voice, while a sombre and irascible disposition naturally arises from the sense of degradation which he experiences. From a consciousness of physical inferiority, Eunuchs are usually most bigoted Mussulmans, seeking in the austere practices of religion a substitute for the ordinary pleasures of life. Some of them have a fondness for female society, and there are instances in which they marry. Circumcision is practiced with the Mussulmans, generally about the seventh year.

In Egypt, females are also circumcised by removing a part of the clitoris. The principal object of this is to moderate the *penchant* of Egyptian females to voluptuousness. It is supposed to have been practised by the ancient Egyptians, and is not prescribed by the religion of the Moslems.

In the East, young females are valued for their virtue. Effective means are often employed to secure virginity until marriage shall take place. In childhood, the labia are scarified and brought together, when adhesion follows, closing up the vagina with the exception of a small opening for the urine and menstrual secretion. The jewel, chastity, is in this manner kept safe. After marriage, a slight operation again opens the vagina. By this means an additional value is given to Circassian and Abyssinian slaves. The operation is not performed upon all who are sold, but upon many. It is not practised to any extent with the Nubians, who are less acceptable to the Mussulmans. On the contrary, I have been informed that it is customary for dealers in Nubian girls to deflower them with the finger, with the idea of contributing thereby to their development. I have also heard it stated, with how much truth I am unable to say, that Mussulmans, when long absent on a journey or pilgrimage, sometimes secure the virginity of their daughters, and even the chastity of their wives, by the means above described.

The Egyptian husband must have ocular proof that he has married a virgin; hence, as among the Arabs, the rupture of the hymen is a public, rather than a private act. The husband deflowers his wife, in the presence of the mothers of both, and other married females belonging to the two families, with the index finger covered with a white muslin handkerchief. Inspired by the most cruel and shameful jealousy, he often employs

a brutal violence in the accomplishment of this barbarous act. The handkerchief, covered with blood, is presented to the friends, who felicitate the victim upon her chastity; and the day after the marriage, the bloody proof of purity is exhibited publicly by the mother, or sister of the bride. If the proof of chastity be wanting, from malformation or previous rupture of the hymen, the female is sent back to her parents, and sometimes even thrown into the Nile. Fortunately, however, this barbarous test of virginity rarely fails; but Egyptian husbands are sometimes duped by artificial means, employed in the absence of a hymen, or even of chastity itself—means well understood by the inmates of the harems.

While in Jerusalem, I devoted some attention to the lepers. Dr. Simms, of the Jews' Hospital, was so kind as to conduct me to their mud kennels in a little enclosure just inside the Sion gate. But few travellers venture into this mephitic retreat, reeking with filth and corruption, for all avoid contact with the lepers. Of these pitiable objects, slunk away in their wretched dens, or lying near the city gates to reach out a trembling hand to the passer-by, there are about thirty in Jerusalem. The disease with which they are afflicted is by no means confined to Palestine, but appears to be more common there than elsewhere; and surely, O reader, one must travel far to behold objects of such intense and corroding misery.

The following description of the leprosy of Palestine, and of the usual course of the disease, is for the most part the result of my own observations upon cases in Jerusalem, some of the suggestions having been borrowed from an excellent article upon the subject, by Dr. Ainslie, published in the Transactions of the Royal Society.

The disease is common in Palestine, and its unfortunate victims are generally to be seen in the towns and cities. It spares no rank or sect, but is more commonly found among the poor than the rich. Aretarus, of Cappadocia, has given us, under the title of *Elephantiasis*, a very perfect description of leprosy. In his account, written in Greek, he makes particular mention of the falling off of the fingers and the joints of the feet. The medical men of his time not unfrequently called the disease *Leonia*, from the circumstance of its distorting the

human face so as to give it an appearance somewhat resembling that of the female lion when enraged. Others bestowed upon it the appellation of *Satyriasis*, from the lascivious disposition supposed to be one of its attendant symptoms, when in reality neither food nor rest invigorates the sufferer, and all carnal appetites, instead of being increased, gradually die away.

Leprosy does not often make its appearance before the age of puberty. In cases where it does appear before that age, it represses in a marked degree the growth and development of the body. The stature never becomes full and graceful, but remains shrivelled and meagre—the voice also continuing shrill and nasal. The mind suffers as well as the body. Lepers rarely smile, are drooping and listless, and several of the pitiable sufferers in Jerusalem appear to have been actually demented by the disease. The malady commonly manifests itself about the age of twenty-three or twenty-four, and rarely after the age of forty.

The symptoms of the *Lepra Arabum*, for that is the scientific name of the disease in question, are as follows :—A dryness and slight roughness of the skin of the hands, feet, arms, and legs, caused by the want of perspiration, are first perceived. The appetite fails, the sleep is disturbed by wild dreams, and the sufferer often wakes up during the night in a fright, with a palpitating heart and a sense of suffocation. In six or eight weeks his color becomes two or three shades darker, and his features slightly tumid. The dryness and roughness of the extremities are followed by numbness and insensibility to pain ; the pulse becomes extremely languid, and dark colored spots and purple tubercles usually appear on the wrists and ankles. The latter are not unlike segments of unripe currants in shape, of a shining and oily appearance, but are not attended with any pain. They increase in size and number, some of them occasionally scaling off to be quickly replaced again, while others generate a small quantity of ichorous matter, which, on drying, occasions a scurvy desquamation. As the leprosy continues to advance, the tubercles extend to the face, and render the person a most unsightly object. At the end of the first year the dryness and rigidity of the skin become universal. The numbness extends above the knees, and is so great that the poor sufferer may,

inadvertently, burn his hands or feet to the bone without being sensible of it. The surface of the body is wrinkled longitudinally, and where sensibility remains, feels as if stung with nettles. The countenance undergoes a marked change; the cheeks become bloated and puffy; the muscles of the forehead, enlarge and appear as if pushed downward, and the eyes, in all cases inflamed, rheumy, and made to look rounder than natural by the pressure from the neighboring parts, resemble those of some wild animal. The lobes of the ear are rough, the tongue is foul and in some cases covered with tubercles, the breath is fœtid, the hairs of the head gradually fall off, the nails break and waste away, the fingers and toes appear withered, and the appetite passes entirely away. In this advanced stage the malady will, sometimes, continue for years, but always with progressive misery.

At last, when the dyspepsia is most tormenting and the respiration hurried,—when the least exertion is sufficient to cause diaphoresis, although the only parts that perspire are the neck and a little surface around the waist—when the sufferer, already ugly, has become indescribably loathsome—a feverish heat comes on regularly every evening, the eyes assume a dim but brassy appearance, the voice sounds hollow, as if from a tomb, the pulsation can be felt only by pressure over the heart itself, ulcerations take place over the joints, and to add helplessness to misery the latter begin, one by one, to fall off. And thus perishes the poor leper in his filthy den, or at the city gate—perhaps in the vicinity of his synagogue or his mosque.

The leprosy of the Arabians—i. e., the disease with which the thirty lepers of Jerusalem are afflicted—is hereditary, but not contagious. Sometimes, however, it skips over a generation. There is an example of this kind in Jerusalem, in which the parents are both lepers, while the son, though considerably advanced in years, exhibits no indications of the disease. I examined the lepers of Jerusalem, as I would any ordinary cases of disease, without fear of contagion. That the Jews do not consider it contagious is evident from the fact that one of their number, who is afflicted with the malady, is permitted to dwell with his friends, and is not cast out among the common lepers.

Women are less subject to leprosy than men, while poor living, want of cleanliness, mendicant misery, and exposure to cold and damp are but too constant attendants of the disease. A fish diet is also found to render every symptom worse. In the East, where the classification of diseases is very imperfect, several kinds of cutaneous affection that are curable pass for leprosy, but the disease whose symptoms I have described appears to be incurable. Life, however, may be prolonged by careful attention to diet, exercise, and cleanliness. Mercury and mineral acids have been employed, but with how much success is not certain.

REVIEWS AND BIBLIOGRAPHY.

"Nullius addictus jurare in verba magistri."

The Causes and Curative Treatment of Sterility, with a Preliminary Statement of the Physiology of Generation. With Colored Lithographs, and numerous Wood Cut Illustrations. By AUGUSTUS K. GARDNER, M.D., A.M., Permanent Member of the National (?) Medical Association; Fellow of the New York Academy of Medicine; Member of the Massachusetts Medical Society; Member of the New York Pathological Society; late Instructor on Diseases of Women and Children in the New York Preparatory School of Medicine; Physician for Diseases of Women in the New York Northern Dispensary; Author of Monographs on Ergot Uterine Hæmorrhage, Rupture of the Perineum, etc., etc. pp. 170. New York: Dewitt & Davenport.

The subject of sterility is one of great interest to the medical profession, as the want of offspring is a fruitful source of domestic unhappiness. As Whitehead very justly remarks, "in cases where the connubial contract results in failure of progeny, both parties being in the enjoyment of health, and of the proper age, the cause is generally attributed, and in the great majority of instances very correctly so, to a faulty condition of the female organs; the non-existence of the procreative power in the other sex being, in reality, extremely rare." The

term impotence has been usually applied to the male, and sterility to the female, but this distinction is incorrect. Impotence consists in the incapacity for copulation, or in the impossibility of exercising the venereal act. Sterility consists in the aptitude of the organ for procreation, without the power of reproduction. The female may, therefore, be impotent from congenital defects, or as the result of pathological causes. The female can only be said to be impotent, when the vagina is incapable of admitting the penis. But this does not necessarily involve sterility, as in some rare and exceptional cases, impregnation has taken place where intromission has been impossible.

The causes of sterility in the female may be divided into the 1. Anatomical; 2. Pathological; 3. Psychological.

The Anatomical causes are the following :—(a.) Imperfect development or absence of some one of the organs of reproduction—as the vagina, the uterus, the ovaries, or the fallopian tubes. Fortunately these causes of sterility are extremely rare.

The Pathological causes may be divided into three classes, viz: 1st. Those which can neither be ascertained during life, nor are amenable to treatment. The most frequent of these causes is adhesion of the fimbriated extremity of the fallopian tubes to the ovaries, resulting from inflammation of that part of the peritoneum covering the ovaries. The sterility of prostitutes is often due to this cause. This condition is often met with in the autopsies at the Blackwell's Island Hospital.

Impermeability of the fallopian tubes is another cause. The uterine extremity may be closed by the continuity of the lining membrane of the uterus over it; or, the canals may be impervious throughout their whole extent. As a remedy for this condition, Dr. Tyler Smith, a few years since, proposed to catheterize the fallopian tube; but we have heard of no one who has had either the hardihood or the adroitness to put the proposition into practice. Remembering this class of causes, we think the following statement, which we find on page 18th of Dr. Gardner's book, will somewhat astonish our readers :—

"One fact should be most particularly noted, that the regular, monthly, bloody flow, is always excited by the discharge of the ovum—that no other hæmorrhage ever occurs periodi-

cally—and as a consequence, which admits of no exception, *every woman who regularly menstruates is capable of being fecundated* under certain circumstances.”

2d. Those causes which can be diagnosticated, but are irremediable—as fibrous tumours of the uterus, cancer, calculous depositions; in short, all those diseases which destroy the tissues of the uterus or of the ovaries.

3d. Those which can be detected, and, under favorable circumstances, removed by treatment.

While we avow our belief, founded on a somewhat extensive experience, that the majority of the cases of sterility are due to this class of causes, we think that the fact should not be forgotten, that when the apparent cause is removed, sterility is not always cured.

Furthermore, no conscientious physician will attempt to treat a case for sterility, without unequivocal evidence of some pathological condition. We will now notice somewhat in detail, the causes which come under this class, taking them up in the order of frequency, as they are met with, according to our belief. The experience of others may differ from our own in this respect.

(a.) *Inflammation and its sequelæ, ulceration, hypertrophy, and induration of the cervix.* Dr. Henry Bennet's work is now so generally known to the profession, that it is unnecessary for us to discuss this cause. We believe sterility is more frequently cured in removing this cause than any other one. But this condition is not always a cause of sterility, for in some females there is a peculiar aptitude to conception, which is not overcome by this pathological state of the cervix, and in others the restoration of the cervix to a healthy state, is not followed by a disappearance of the sterility. Dr. Bennet remarks, that in those cases in which conception has followed the removal of the disease, it has generally been only after an interval of a year or more. It would seem as if time were required for the uterus to recover its physiological powers. The truth of the remark will be confirmed by all who have had the opportunity of forming an opinion from observation.

(b.) *Partial chronic inflammation of the body of the uterus.* This is met with most frequently in the posterior wall of the uterus, resulting from an extension of chronic inflammation of the cervix to the body of the organ. But, in some cases, it is a sequence of parturition; the uterus at that time being in a highly vitalized condition, does not return to its normal physiological state. The inflammation is only an exaggeration of the physiological circulatory state of the uterus after confinement. Most practitioners can recall cases where sterility is manifestly due to this cause,—the patient having once conceived, but after abortion or parturition at the full period, symptoms of chronic partial metritis have been developed, with marked exacerbations at the approach of the menstrual period. Conception rarely occurs where this condition exists, and if it does occur, it proves a curse rather than a blessing.

(c.) *Inflammation of the cavity of the body.* Dr. Whitehead regards this, which he terms chronic endo-uteritis, as one of the most frequent causes of sterility, which he accounts for in three ways.

1st. The inflammatory action going on within the uterus, and which is liable to be aggravated under states of venereal excitement, may prevent the formation of the decidua membrane; and the ovum, even although impregnated, is necessarily thrown off without any manifestation of its existence in the fertilized state. 2d. The diseased condition of the lining membrane of the uterus may be extended to the fallopian canals, obliterating for the time their internal orifices, so as to oppose an insurmountable obstacle to the admission of the spermatic fluid within them, and thus to render the fertilizing effort abortive. 3d. The nature of the secretion furnished by the internal surface of the uterus, or of the vagina, under certain states of disease, may be inimical to the active existence of the spermatozoa, occasioning their destruction before they arrive at the extricated ovule. It may not be out of place for us to say here, that we have recently been much more successful in treating this disease than formerly. By means of Dr. Sanger's uterometer, an ointment of nitrate of silver is carried into the cavity of the uterus, with the happiest results. The

following is the proportions of the ointment which we generally use :—

R Nit. Argent Crys.		3ij	
Ext. Hyoscyami }	aa	3ss	M
Ung. Cetacei }			

Granulations of the cervix uteri. This is an affection little known to the profession as a pathological condition, although it is by no means a rare disease. It almost invariably causes sterility. We have never known an exception. It consists of an hypertrophy of the mucous membrane, or of the numerous follicles, which exist in the thickness of this membrane, more abundant in the uterine orifice than every where else. The French, in describing it, have used the term *framboisée* from the little hard, fleshy elevations on the os tincæ, resembling the distinct elevations of the raspberry. So, also, some of them speak of it as a granulous or raspberry-like inflammation (inflammation granuleuse ou framboisée.) But this is incorrect; it is not an inflammation, but an affection, *sui generis*, peculiar to this organ. The only part of the system in which analogous granulations are found, is the pharynx, as the pharynx alone possesses the same follicular disposition. Neither is it, as some have supposed, a result of inflammation. Again, the terms granulous excoriations, granulous ulcerations, have been employed to designate this disease, but they are equally improper. In ulceration there is always loss of substance, more or less extensive. But in the granulated state of the neck of the uterus, there is always a relief, a projection, an increase of substance; the *prominence* is perfectly appreciable to touch. Furthermore the granular state is accompanied by an excretion of glutinous, tenacious, semi-transparent, or sometimes slightly opaque and puriform mucus. Ulcerations, on the contrary, present the veritable pus at the surface without the mixture of any sort. The granulations commence in the interior of the neck, and extend by degrees from within to without. It causes sterility for two reasons. The mucous membrane which covers the internal surface of the orifice is tumefied, and this tumefaction diminishes by so much, the diameter of the orifice, and thus prevents the penetration of the

semen into the cavity of the organ. 2d. The viscous, glutinous character of the discharge from this orifice, its physical properties, are opposed to fecundation, as the mucus is often so tenacious that it is difficult to raise it with the speculum forceps. Several instances have occurred in our practice, where women have been married several years without conceiving, who were found to be affected with this disease, but who have become *enceinte* after having been subjected to the appropriate treatment for its cure.

Stricture of the canal of the cervix. This may be congenital, or the result of inflammation, or produced by flexion of the uterus. Dr. Mackintosh, of Edinburgh, regarded this as a condition frequently to be met with, and first recommended dilatation by bougies, which he tried in 27 cases, and cured 24; of these 24, 11 afterwards bore children. Dr. Bennet mentions two cases in which pregnancy occurred after dilating the cavity, and dividing the os internum by the metrotome; but he says that in both, inflammatory disease had existed, and it is difficult to say whether the dilatation had anything to do with the subsequent impregnation. He adds, "on the other hand, I have, in at least ten or twelve instances, dilated the cervix and divided the os internum in patients cured of inflammation, who have remained sterile." Our own opinion is, that this condition of the cervix is an occasional, although rare, cause of sterility.

Subacute ovaritis. This is considered by Dr. Tilt as the most frequent cause of sterility. It produces it, 1, by accelerating the shedding of imperfectly developed ova; 2, by the retention of blighted ova; 3, by impeding their transmission from the ovaries to the uterus.

Since the publication of Dr. Tilt's work, we have been constantly on the look out for this disease; but we are compelled to believe that as an idiopathic affection it very seldom occurs. The group of symptoms which he considers as characteristic of this disease are often met with, but it is almost invariably associated with inflammatory disease of the cervix, and disappears spontaneously when the uterine disease has been cured. Indeed,

these symptoms are often developed in consequence of local applications made to the cervix, but they continue only during treatment.

Follicular disease of the vagina and chronic *granular vaginitis* Mr. Donn  first called attention to the fact that the spermatozoa live perfectly in the mucus secreted by the vagina in its normal state; but that the vaginal mucus becomes so acid in some circumstances, as in cases of congestion, irritation or inflammation of this organ, that the spermatozoa appear to perish in a few seconds after being brought in contact with it. He suggests, "is it not remarkable that the means which appear to have been employed with the greatest success against sterility—such as sea-bathing, for example—are, at the same time, those which act upon the economy in general, as powerful modifiers of the secretions."

The above constitute the more common causes of sterility, which are susceptible of being remedied by treatment. As rare causes may be mentioned *uterine polypi*, *syphilitic hypertrophy of the uterus*, and *atrophy of the uterus*. We mention this latter among the causes, as in one case this condition was successfully treated. This lady, aged 22, married 4 years, first came under our care in 1851. She never menstruated previous to her marriage, although in perfect health in other respects, and remarkable for her personal beauty. Soon after marriage the function was imperfectly established. The secretion was very scanty, not exceeding a few drops per diem, but continuing six days, and attended with such severe pain as to confine her to her bed during the whole period. For the relief of this condition she had been under constant medical treatment. Her sufferings were rendered tolerable only by enormous doses of morphia. On a careful examination, no pathological condition could be discovered, except that the uterus was very small. The os tin e felt to the touch like the nipple of a pregnant woman, while the body of the uterus could not be felt either through the vaginal or the rectal walls. During several months, for a week previous to the menstrual period, we practised, daily, direct cupping of the uterus.

Each succeeding period, the menstrual flow became more abundant, and the suffering constantly diminished, until she

was able to dispense entirely with the use of opiates. The increase in size of the uterus was remarkable. She has now become a mother.

Having mentioned the principal local conditions which give rise to sterility, and which are amenable to treatment, it will hardly be necessary to allude to the various constitutional conditions which render ovulation imperfect, and thus cause sterility.

The influence of climate and locality on fecundation affords an interesting field for study and investigation. The females of Ireland, those on the coasts of the Mediterranean, of the Island of Martinique, and of lower Egypt, are remarkable for their productiveness. In a certain locality of Connecticut, amenorrhoea and sterility are almost the rule. It is said, that in California sterility is almost unknown. We have been informed that many females have become fruitful, who were barren before removing there.

It does not comport with the practical purpose of this paper to discuss the *Psychological* causes of sterility. A cold, apathetic disposition, want of homogeneity of temperament between husbands and wives, undoubtedly exerts a strong influence in producing an unfruitful union, while a new and unusual moral excitement frequently arouses the dormant sensibilities of the reproductive system.

B. F. B.

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1. *Prize Essay on the Use and Abuse of Alcoholic Liquors, in Health and Disease.* By WM. B. CARPENTER, M.D., F.R.S. Philadelphia: Blanchard and Lea. 1853. 12mo. pp. 178.
 2. *The Physiological Errors of Teetotalism.* Westminster Review, July, 1855.

[The following paper, copied from the *North American Review*, is from the pen of Dr. E. R. Peaslee.—Ed.]

Whether the doctrine of total abstinence from alcoholic drinks for persons in health is based upon the established facts and principles of physiology, is a question whose scientific interest is second only to its moral importance. It was decided in the affirmative by Dr. Carpenter; and no physiologist appeared to raise any essential objection to his conclusions. A writer in the Westminster Review has, how-

ever, recently attempted to reverse his decision ; and thus the question is opened anew. Many also profess to agree with the reviewer ; and we therefore propose to examine his arguments,—this being the first and the sole professedly scientific and logical defence of the habitual use of alcohol, on physiological grounds, which has attracted our attention.

To use the words applied by the reviewer himself to Dr. Carpenter, "If we confine our polemics to statements advanced by him, we limit the sweep of argument, shorten the demand on the reader's patience, and avoid the necessity for the pitiable exposure of nonsense advanced by champions less able." "Let us find the vulnerable points in his argument, and we need not waste blows on those who fight under his banner."

It is unnecessary for our present purpose to give more than a rapid glance at Dr. Carpenter's conclusions. As a warrant for the high scientific reliability of his essay, it need only be said that he is one of the most distinguished of living physiologists ; that "he has never allied himself with any Temperance Society, so called"; that he has treated the subject as one of "purely *scientific* inquiry ; and has avoided mixing up any other considerations with those which presented themselves to him as a physiologist and a physician."

It was the condition imposed by the donor of the prize, that the Essay should answer the following questions :—

"1. What are the effects, corporeal and mental, of alcoholic liquors on the healthy human system ?

"2. Does physiology or experience teach us that alcoholic liquors should form part of the ordinary sustenance of man, particularly under circumstances of exposure to severe labor, or to extremes of temperature ? Or, on the other hand, is there reason for believing that such use of them is not sanctioned by the principles of science or the results of practical observation ?

"3. Are there any special modifications of the bodily or mental condition of man, short of actual disease, in which the occasional or habitual use of alcoholic liquors may be necessary or beneficial ?

"4. Is the employment of alcoholic liquors necessary in the practice of medicine ? If so, in what diseases, or in what forms and stages of disease, is the use of them necessary or beneficial ?"

In reply to the first question, Dr. Carpenter shows that alcohol irritates and corrugates the healthy tissues, impedes the solidification of fibrine, produces changes in the red corpuscles of the blood, and causes a temporary exaltation of the nervous power. He also gives the phenomena and the pathology of alcoholic intoxication, and specifies the diseases produced by the excessive use of alcohol in the

nervous system, the alimentary canal, and special organs, besides general disorders of nutrition, diminished power of sustaining injuries from disease or accident, liability to various epidemic diseases, gout and rheumatism, and morbid affections of the heart and arteries. He also states, that "no life-insurance office will accept an insurance on an individual whose habits are known to be intemperate," experience having shown that such habits greatly shorten life, as, for instance, in the admitted fact that nearly three times as much sickness occurs among those soldiers serving in India who are not, as among those who are, members of temperance societies. From all these facts, Dr. Carpenter concludes that alcohol has an injurious effect upon the healthy human system.

In answer to the second question, the author shows that the power of enduring bodily and mental fatigue is diminished by alcoholic liquors; and that the power of enduring cold and heat, and of resisting morbid influences, is not increased by them, as is often asserted. They produce a temporary elevation of temperature, if taken into the stomach while fasting; but wholesome food containing some proportion of oleaginous elements generates still greater and far more permanent calorific effects. Dr. Carpenter concludes that "the habitual use of alcoholic liquors, in moderate, or even in small quantities, is not merely unnecessary for the maintenance of bodily and mental vigor, but is even unfavorable to the permanent enjoyment of health, though it may for a time *appear to contribute to it*."

Dr. Carpenter admits, in reply to the third question, that in some emergencies, and where a single great effort is to be made, alcohol may prove a stimulus capable of aiding in securing the result. That its use, however, is not the best method even in such cases, is shown to be the general fact; for the secondary injurious effects are experienced in these, as well as in other circumstances. It is admitted by Dr. Carpenter, that in certain exceptional cases of debility of the stomach, and in certain infirmities of old age, some benefit may be permanently derived from alcoholic drinks in small quantities; but it is impossible to decide *a priori* in favor of such a practice in any given case, and its adoption is a dangerous experiment. We remark, however, that he who, whether old or young, has a permanent debility of the stomach, cannot be regarded as possessing a "healthy human system."

The fourth question Dr. Carpenter answers in the affirmative; and specifies the morbid conditions in which alcoholic drinks may be administered *medicinally*. But as our present concern is with the use of alcohol in health, we here suspend our sketch of the Essay.

We now come to the article in the Westminster Review, which claims entirely to demolish Dr. Carpenter's Essay, and to prove that the habitual moderate use of alcohol is beneficial to the healthy human organism.

In a boastful exordium, the writer would at once prepare his readers to expect the speedy defeat of his antagonist. "We must," says he, "call in the aid of Logic, for we have to combat a fallacy ; we must call in the aid of Science, for we have to combat a scientific error." "We have to show that the fears of the moderate are idle." He also bespeaks good-will by the assurance that Dr. Carpenter's argument "staggered" him, "and for a time coerced his assent, until a more exact scrutiny revealed the *fons et origo* of Dr. Carpenter's error." Professing also to sympathize with the moral aspects of the temperance movement, he says : "Considered as a moral movement, it is difficult to speak of it in terms too laudatory." "We rescue a scientific question, we do not oppose the moral principles of the movement." Indeed, he virtually admits that even total abstinence is very well for the masses. "Nevertheless," he continues, "we shall restrict ourselves to the question of the use of alcohol by moderate and sensible persons. The readers of this Review [the Westminster] are obviously not of the poorer classes. Very few of them are likely to be among the intemperate ; to them the teetotal arguments are impertinent."

We propose to institute a somewhat exact scrutiny of the reviewer's arguments, and to show that they are entirely fallacious. We shall endeavor to use only the weapons he has himself put into our hands ; since, as he asserts of Dr. Carpenter, "it is with his own weapons he can be overthrown." But whoever makes such pretensions to science and logic prescribes to himself a most rigid adherence to facts and right reasoning ; and, if found deficient in these cardinal points, he must expect precisely such treatment as science and logic may award to him.

The main object of the article under consideration is to prove the two propositions,—first, that alcohol is food ; and secondly, that use is not abuse. All the other points raised are merely collateral to these ; for if alcohol be food, the inference seems legitimate that its moderate use is beneficial to the healthy human organism, and that therefore abstinence from it is a "physiological error ;" and if use is not abuse, and does not necessarily lead to it, the reviewer infers that the effects of an excessive, constitute no valid objection to a moderate use.

Before proceeding to establish the propositions just stated, however, the writer specifies the "two vulnerable points" of Dr. Carpenter; namely, "first, the confused conception he entertains of what strictly speaking, must be called *food*; and secondly, the fallacy of arguing from abuse to use."

The position of Dr. Carpenter to which the reviewer first objects is, that "alcohol is essentially poisonous." He admits that large doses of it will kill; but this does not prove it to be essentially poisonous, since oxygen is not so, and yet an over-dose of oxygen will kill. He does not, however, inform us in what the essentiality of a poison consists; and since his argument applies no less to arsenic and strychnine than to alcohol,—since these two substances also kill only when taken in an over-dose,—the inquiry need not at all detain us. In this connection he also sneers at the idea that the word *intoxication*, used to express the effects of alcohol, has been adduced to support its claim to be considered a poison; and remarks that "Philosophy shrugs its shoulders at such proof." We merely remark, that Dr. Carpenter does not adduce this fact as proof, but merely as affording a presumption in favor of the idea that alcohol is a poison,—a presumption which no physiologist will fail to appreciate.

Since our writer argues in favor of the "moderate" use alone of alcohol, it is quite important that our readers should know, at the outset, what his "moderate man" is. "The moderate man," says he, "drinks beer, or wine, at dinner, is not accustomed to anything approaching to intoxication, although he may occasionally take 'more than is good for him,'—which excess he sleeps off that night,—or pays for by a headache next morning, and hears no more of it." And he adds, "If positive science and daily experience warrant any decisive conclusions on this subject, they warrant the conclusion that to such a man alcohol is beneficial."

Now it strikes us as very singular that a writer, *professedly* scientific, should have inserted in a definition two so indefinite terms as "occasionally" and "accustomed." The former may mean once a year, or once or twice a week, according to the various interpretations of different readers; and surely the "benefit" derived from alcohol by the drinker, when "more than is good for him" is taken, must vary widely with the greater or less frequency of the indulgence. Moreover, we are not informed how often a man must experience "anything approaching intoxication," to be "accustomed" to it. "Strictly reasoning," the whole argument is vitiated by this looseness of expression. Waiving this radical defect, however, we find

that the position to be proved, when divested of all non-essentials, is this : Positive science and daily experience warrant the conclusion, that if a man drinks beer or wine at dinner, (it being understood, we suppose, that he gets a dinner every day,) yet is not accustomed to anything like intoxication, though he *occasionally* takes "more than is good for him," but sleeps off the effects that night, or merely feels them in the form of a headache next morning,—to him, though in perfect health, the use of alcohol in this way, and to this extent only, is *beneficial*. For, (1.) Alcohol is food ; and, (2.) Use (such as this) is not abuse, and does not necessarily lead to abuse.

The proposition that alcohol is beneficial where the drinker takes "more than is good" for him, we need not very seriously discuss. Just so often as that amount is taken, alcohol, we suppose, is not beneficial. The general proposition, therefore, that "to such a man alcohol is beneficial," is marred in the very making.

We omit the reviewer's comparison of the effect of alcohol on the constitution to that of a weight upon a spring, which at once rebounds when the weight is removed,—and to the effects of heat, and oxygen, and even of "mutton chops," upon the tissues,—as a mere fallacy ; since no real analogy exists in the things compared. Indeed, the reviewer himself "begs the reader not to lay too much stress on these illustrations, or to suppose the writer offers them as arguments." They, in fact, subserve no other purpose than to throw dust into the reader's eyes at the outset.

The following sentences are also adapted to give the reader a false impression. "Whatever air of paradox may hover round the assertion that alcohol is food, arises from the popular ideas of food, which are extremely vague and confused. To the popular mind it would be equally paradoxical to say, iron is food, salt is food, chalk is food; the popular idea of food being limited to substances which eaten by themselves 'nourish' and allay hunger.—*Nous avons changé tout cela.*" "No one would think of nourishing a pigeon on chalk, yet the celebrated experiments of M. Chossat prove that pigeons deprived of chalk die of inanition, first suffering from a complete softening of the bones."

Thus the idea is suggested that alcohol, like iron, salt, and chalk, is essential for the nourishment of the tissues. But iron is indispensable, because it is always naturally present in the blood and some of the tissues ; salt normally enters into the composition of all the fluids and tissues of the body ; and chalk (carbonate of lime) is necessary to the development and nourishment of bone. Alcohol, on the other

hand, is not essential to the development of any part of the body ; and, still more, not a particle of alcohol can by any means be converted into any tissue whatever. There is, therefore, no physiological analogy in the things compared, and the illustration can only mislead the reader. On the contrary, if iron, salt, and chalk are food because they enter as elements into the normal composition of different tissues, then alcohol is not food, as it enters not thus into a single tissue.

But we now proceed to examine the reviewer's arguments in support of his principal proposition, that "alcohol is food." It occurs to us as a striking fact, that in their whole course he does not quote a single physiologist in opposition to Dr. Carpenter, except in the use of two or three unimportant extracts from Moleschott's work, but relies on the testimony of chemists alone. Liebig is the authority almost exclusively cited. The accuracy of his opinions on the physiological bearings of this subject will be tested as we proceed.

The reader will the more clearly perceive how inconsequent and fallacious are our reviewer's conclusions, if it be remembered that he attempts to show, first, that "food is force," secondly, that "alcohol is force," and therefore, thirdly, that "alcohol must necessarily be food." We shall examine his arguments in proof of each of these propositions.

"Science teaches us that food has to be considered under three aspects:--1. It repairs the waste of tissue consequent on the wear and tear of life ; 2. It furnishes fuel for respiration, the main source of animal heat ; 3. Under both these heads it is the generator of force."

Now, though the first two of these assertions just quoted are physiologically correct, the three together do not include all the physiological relations of food, and the last is untrue. Certain elements of our food repair the waste of the tissues, and are hence termed nutritious or plastic elements. These are albumen, caseine, fibrine, etc., and these alone are properly called *nourishment*. Other elements do not at all repair the tissues, but being acted upon, after they are digested and absorbed into the blood, by the oxygen derived from respiration, they are literally burned up, and thus, producing heat, aid in maintaining the normal temperature of the body. Hence they have been termed "fuel for respiration," "respiratory material," and, better still, "the calorific elements of our food." They are starch, sugar, gum, and dextrine. The fat in our food, too, is in great part merely calorific ; though it is also nourishment so far as it contributes to the development or the repair of the adipose tissue.

But the author has entirely overlooked and ignored the residual elements of our food, which traverse the alimentary canal without undergoing any change whatever.

As a specimen of our reviewer's scientific accuracy in the use of terms, we call attention to the fact, that in the passage just quoted he states that both the plastic and the calorific elements of food *generate* force ; a little farther on he says, "all food is ultimately *translated* into force ;" and still farther, that alcohol, which he asserts is food, *evolves* force ; and again, that Dr. Carpenter knows that alcohol "*gives* force." Now these four terms are very far from being identical in meaning ; and no two of them are so. Which, then, expresses the writer's actual meaning ? But we need not lose time in attempting to settle this question, since it will appear that neither of the words used is at all consistent with the facts. Moreover, in regard to the kind of force, he says at first, "into *motive* force all food is ultimately translated." Afterwards he says, alcohol (being food) "is translated into *nerve* force ;" and again, "into nerve force or some *substitute* for nerve force." Are nerve force and motive force, then, identical ? and is there any such thing as a substitute for nerve force ? Our scientific champion evidently entertains conceptions somewhat "confused" of what, "strictly speaking must be called" nerve and motive force.

But next let us adduce the facts which decide whether any, and if so which, of the elements of our food are generators of force. And, first, the *residual* elements, overlooked by the reviewer, are surely not generators of, nor translated into, force of any description ; though they constitute a considerable and an indispensable part of the food of all the higher animals. To this class belong woody fibre, resinous matters, the envelopes of fruits, and the husks of seeds (as the bran of wheat, &c.) ; all of which pass unchanged through the alimentary canal. The precise uses of the residual elements of food are explained in every extended treatise on physiology, and need not detain us here. Nor, secondly, are the *calorific* elements of food translated into force. They are converted into carbonic acid gas and water by the action of oxygen, as already explained ; and this union of oxygen with their elements, being chemically a true combustion, produces heat, precisely as does the union of the oxygen of the atmosphere with the carbon and hydrogen of coal when it is burned in a grate. And this is all. The calorific elements of food are finally "translated into" carbonic acid and water, and thus produce heat. But heat is not motive force, nor nerve force, nor a substitute for the

latter. It is merely a physical agent, while both the forces just named are vital forces. The idea that mere heat can be converted into any phase of vital force is preposterous ; and the reviewer neither attempts to prove, nor even insinuates, anything of the kind. Nor, thirdly, can it be said with accuracy that the *plastic* elements of food are translated into force ; though if they are so, the fact is of no consequence to the reviewer, since he admits that alcohol does not belong to this class of elements. The simple fact is, that the plastic or nutritive elements of food are converted into the various tissues, and that each of the tissues manifests its own peculiar phase of vital force,—the muscles, contractile or motive force ; the nervous centres, nervous forces, &c. The tissues are excited to the manifestation of vital force, each by its appropriate stimulus ; but the tissues themselves are in no case “translated into” force. They merely constitute the organization, the peculiar mechanism, by means of which vital force is manifested, as does the engine the mechanism by which physical force is manifested ; and in the former, as well as in the latter case, the wear and tear are proportioned to the amount of activity, or of force developed. We perceive, then, that precisely the reverse of our reviewer’s cardinal proposition is rigidly true ; namely, that no part of our food is translated into force. It follows, therefore, that, if alcohol is translated into vital force, it cannot be food ; and that, if it actually is respiratory food, it cannot be translated into vital force, but can only produce heat by its combustion in the blood.

The reviewer, supposing the reader to be satisfied that all food is force, next announces that “Alcohol is Force.” He, however, merely asserts in support of this proposition, that “Dr. Carpenter knows better than most people that alcohol gives force.” We wait, however, for the admission from Dr. Carpenter himself. Every one knows that alcohol, taken in a sufficient quantity, *excites* force ; but this is a very different thing from *giving* it. The spur on the rider’s heel excites force, but does not give it. Hay and grain, moreover, do not excite the force of the horse in this way ; and none would contend that the spur is a part of the animal’s food.

But we now come to the most remarkable portion of the article under consideration,—at least so far as its logic is concerned : “The reader has already outrun our conclusion, that if food is force, and alcohol is force, alcohol must necessarily be food.” Since the high character of the Westminster Review precludes the idea that this syllogism was intended as a transparent joke, we will crave the

reader's patience while we illustrate its singular capabilities. "Food is force ; and alcohol is force ; therefore alcohol must be food." By this logical formula we may prove that any two things possessing a single property in common must be the same generically and specifically. Thus : "Man is an animal, and a horse is an animal ; therefore a horse is a man." And again : "Chalk is white, and snow is white ; therefore snow is chalk." But we are mainly interested in the number and variety of its applications to the subject under consideration. Indeed, it proves so much as entirely to demolish our logician's favorite conclusion. First we have, "*Alcohol is food*," according to the original formula. But, 2. "Alcohol is force, and food is force ; therefore *food is alcohol*." 3. "Food is force, and arsenic is force ;* therefore *arsenic is food*." 4. "Alcohol is force, and arsenic is force ; therefore *arsenic is alcohol*." But enough of such "calling in the aid of logic to combat a fallacy." Logic "shrugs her shoulders" at such reasoning as this ; and we proceed to examine the curious structure of the "links of the chain of demonstration" of the proposition that "alcohol is food."

The reviewer first cites a passage from Dr. Carpenter's treatise on Physiology, which, he says, is "addressed to men of science," and asserts that it contradicts his Essay on the effects of alcohol, thus placing Dr. Carpenter, as he assumes, in the very ungracious position of "himself maintaining that alcohol is food, not poison ; unless Dr. Carpenter retracts his own language, unless he withholds the name of food from all substances not forming tissue."

We hold the insinuation that Dr. Carpenter has spoken the truth, when obliged to do so, in a work addressed to men of science, while he intentionally suppresses or perverts it in a more popular essay, to be simply contemptible. Our reviewer "knows better than most people," that Dr. Carpenter's scientific reputation is as much concerned in his work on the physiological effects of alcohol, as it is in his work on physiology in general. He is also doubtless aware, that, if there is an apparent contradiction in these two works, candor requires that he should regard the Essay on this special subject as embodying Dr. Carpenter's more mature views of the effects of alcohol, and those which he is prepared to defend. But a fair interpretation does not suggest to the reader even an apparent contradiction. On the page containing the passage quoted by the reviewer, Dr. Carpen-

* The reviewer states that arsenic "gives to both horses and men increased beauty, and an enviable rejuvenescence, when taken regularly in minute doses."

ter classifies "the organic compounds *usually employed as food* by man," under four heads,—the Saccharine, Oleaginous, Albuminous, and Gelatinous; and, speaking of the Saccharine, has the passage alluded to: "To this group belong starch, gum, woody fibre, and the cellulose of plants, which closely resemble each other in the proportion of their elements, and which may be converted into sugar by chemical processes of a simple kind, whilst *alcohol*, which is derived from sugar by the process of fermentation, has a *composition* which rather connects it with the next group."* But Dr. Carpenter is not here deciding the question what is food, physiologically considered. He is merely classifying the "compounds *usually employed as food* by man;" and after specifying starch, gum, woody fibre, and cellulose as food, he adds that alcohol is unlike these compounds both in its origin and its chemical composition, and in the latter respect is more nearly allied to the Oleaginous group. He does not intend to say here that alcohol is food, or is not food, physiologically considered. It is often taken with food by man; and he means to say of it precisely what he does say, and nothing more,—though certainly his remark suggests the inference that it cannot be properly classed with the elements of our food. In his other work, however, he discusses that question at length; and decides that, physiologically speaking, alcohol is not food. This "link of the chain of demonstration" therefore fails entirely.

The reviewer next quotes Liebig: "The amount of nourishment required by an animal for its support must be in a direct ratio with the quantity of oxygen taken into the system;" and adds; "But under the term nourishment our readers have learned to include alcohol, which nourishes as fuel." Liebig is also quoted and commented upon as follows:—

"Of all respiratory [calorific] matters, alcohol acts most rapidly, [i. e. is most rapidly consumed,] says Liebig; and in this rapidity there is great virtue, for starch, very good food in itself, requires some hours before it becomes soluble in the alimentary canal of the bread-eater, so as to enter the blood, and there serve the purposes of respiration. Both starch and alcohol are burned, and in burning throw out force; but when the demand for force is urgent, the food which most rapidly creates it is the most valuable."

It is here proper to inform the reader, that alcohol is capable of producing three entirely different effects, in proportion to the amount taken into the stomach. If a very small quantity, well diluted, be taken when the stomach is nearly empty, (one drachm, perhaps, in

* Principles of Human Physiology, Fifth American Edition, p. 376.

the case of most persons,) it is very rapidly burned up by combination in the blood with oxygen, and thus produces heat, it being converted into carbonic-acid gas and water. Only under these circumstances is Liebig's assertion true. If a larger dose be taken, so as to be felt at all in the head, it has a stimulant, and not a calorific effect. In this case it *excites* force; in the other, it *produces* heat merely. In a still larger dose, alcohol becomes a narcotic, and produces the stupor characteristic of the narcotic poisons. In this case, it paralyzes force, and at the same time, instead of proving calorific, perceptibly diminishes the heat of the body. It is therefore only when alcohol ceases to be alcohol, or is burned up, that it is calorific; so long as it remains in the blood unchanged into carbonic-acid and water, and manifests its real character, it is either stimulant or narcotic, according to the quantity taken.

These facts are ignored by the reviewer; and from Liebig's unqualified assertion that alcohol is rapidly burned, he deduces the inconsequent conclusion that it is better food than starch and sugar, after repeating the groundless assertion that starch and sugar in being burned throw out force. To make the last sentence quoted from Liebig even theoretically true, we must read it thus: "Both starch and alcohol are burned, and in burning throw out heat; but when the demand for heat is urgent, alcohol, as creating it the most rapidly, is the most valuable." Of course, in all other circumstances, starch is the most valuable. Practically, however, the sentence, even as altered, is not true. For, in order to prove merely calorific, alcohol must be taken in very small quantities; and it is so rapidly burned up, that the small doses must be almost incessantly repeated. Even thus, if we may credit our reviewer, we cannot long keep up the supply; for he says, "Alcohol is not, and cannot be, continually present in the blood;" and adds, that, if this were possible, it would produce a fatal effect. Not very reliable, valuable, or safe food this, we think! Starch and sugar are far better; since they may always be kept on hand in the blood, and never produce any dangerous effects. If it require "some hours" for the last mentioned elements to enter the blood of the bread-eater, he has only to take another meal the same number of hours (as we all do) before the proceeds of the preceding one are consumed, and he will always have a sufficient amount of fuel on hand. Alcohol, therefore, if it is food at all, is so because, like starch and sugar, it is a producer of heat, and not because it is force, or an exciter of force. So far as it affects force, it is a stimulant or a narcotic, and in no possible sense food.

But the reader may ask, What is the physiological objection to recognizing alcohol as food, since, like the amylaceous and saccharine elements of food, it is, in the circumstances mentioned, a producer of heat? We answer, that the *characteristic* physiological effects of alcohol are its stimulant and narcotic powers; it is calorific only incidentally, and when taken in doses not sufficient to manifest its essential character. In its calorific capacity, we have seen, too, it is utterly incapable of sustaining that equable temperature of the organism required for the highest development of the vital force. We have also seen that, even were it a valuable calorific element, this fact does not really concern us in our present argument, since "the moderate man" uses alcohol in stimulant doses at least, as the reviewer admits, and thus the idea of its being food, like starch and sugar, is entirely precluded. Moreover, if the reviewer adopts the proposition that everything is food that is calorific, it is one altogether too pregnant for his purpose. If alcohol is food merely because it is calorific in certain circumstances, so are ether, and many of the essential oils; and the reviewer, if consistent, must also add these to his bill of fare. Physiologically considered, then, alcohol is a stimulant and a narcotic, and is not food.

Having previously asserted without the least warrant, as we have seen, that alcohol is nourishment, the reviewer next gathers strength to make the extraordinary statement, that "the *digestibility* of alcohol (so to speak) surpasses that of any other aliment; it requires less elaboration to fit it for its ultimate purpose, namely, its translation into nervous food." Hitherto we have been told that all food (and of course alcohol) is converted into motive force. But this discrepancy has already been alluded to; and whether the reviewer is ignorant of the difference between motive force and nerve force, or is here unfairly substituting the latter term for the former, the reader may decide. But what is "digestibility (so to speak)"? This is a somewhat ambiguous expression for a scientific writer. Digestibility has reference to the ease and rapidity with which food is digested; but alcohol is not digested at all. It is absorbed into the blood from the stomach and the lower portions of the alimentary canal, without undergoing any previous change. We therefore make no further comments on the preceding quotation.

The third link of the chain of demonstration is thus constructed: "Alcohol stands high as a respiratory material. Its use enables us to dispense with starch and sugar in our food." (Liebig.) Is more wanted," demands the reviewer, "to show that alcohol is food?"

Besides, the reviewer informs us, that the members of the Peace Congress at Frankfort ate an enormous amount of pudding, because they drank no wine. For "wine replaces pudding," and "pudding replaces wine;" but "poisons have not the property of replacing wholesome food." Therefore alcohol (wine* rather) is food. "Wine replaces pudding," which is doubtless food; and "therefore wine is food." But pudding also replaces wine, which is doubtless a stimulant; and therefore, by the same reasoning, pudding is a stimulant!

But let us examine these propositions in detail. And, first, has Liebig or any one else known an alcohol-drinker entirely to dispense with the amylaceous and saccharine elements in his food? It would certainly require more than a "moderate use" of alcohol to replace all of these elements. But the reviewer also says, in another connection, that alcohol "cannot be continually present in the blood." What would then ensue, if starch and sugar were dispensed with, when the alcohol failed? Death, we suppose, from the entire loss of animal heat. How then can the reviewer say, from Liebig, that alcohol "stands high" as a respiratory material? According to his own statement, it is superior to starch and sugar only in the fact of burning more rapidly; a quality which has been shown to render it unfit for calorific purposes, in an organism where a steady and uniform temperature is demanded. We should add, however, that we have quoted the reviewer's assertion that "alcohol cannot be constantly present in the blood," only in order to allow him to refute himself; the fact being, that it can be kept constantly present in the blood during an indefinite period, if the doses be often enough repeated. So long as a person exhales the odor of alcohol in his breath, he is exhaling alcohol from the blood as it circulates through the lungs, and so long it is of course present in the blood; and every one knows that some persons exhale alcohol in every expiration for weeks at a time. Our writer, however, asserts that, if the blood could be kept constantly charged with alcohol, it would produce fatal effects; and this assertion with some qualification is true. But, again to reverse his argument, "it is not the property" of wholesome food to produce fatal effects merely from being constantly present in the blood; therefore alcohol cannot be food. Besides, if alcohol is food because it "replaces" food, in some sense arsenic is also food; for, as the author asserts, a given amount of food with "regular doses"

* Wine contains only from nine to about twenty-six per cent. of alcohol; the remainder being water, sugar, acids, &c.

of arsenic added confers both on horses and men increased fulness of form and vigor, while the food alone would not have this effect. The reader must not, however, be surprised at this conclusion; since we have previously shown that arsenic is food by another formula which the reviewer has afforded us.

Our reviewer continues his reasoning as follows:—

“If we reflect that alcohol is respiratory food, and that the organism needs five times as much respiratory food as plastic food, we may be able to explain the notorious fact of hard drinkers scarcely taking any ‘food’ (except their drink), and yet, in spite of this absence of ‘food,’ they manage to live on through many years, performing all their functions, not very vigorously it may be, not as highly reputable citizens, but nevertheless *living*, and upon a quantity of ‘food’ so small that life could not be sustained a month on such a quantity, did they not call in the aid of a poison. This paradox it was incumbent on Dr. Carpenter to clear up.”

Then the writer quotes Dr. Carpenter’s assertion, that mere alcohol does not contribute to the renovation of muscular tissue, and his reasons also for believing that it cannot be converted into nerve tissue. In respect to these points, however, he accuses Dr. Carpenter of “confusion,” and objects that he “limits” nutrition to the tissue-forming process. So, we reply, does every other physiologist; though he says, “no one knows better than Dr. Carpenter the error of such a limitation.” Having thus a second time groundlessly alleged a perversion of the facts, his audacity culminates in the assertion, that Dr. Carpenter “shifts a question of force to one of tissue.” We will only assert, on the contrary, that the reviewer himself has shifted a question of *tissue* to one of *force*. “The point in debate is not,” he says, “whether alcohol can be converted into nervous *tissue* (which may or may not be the case), but whether it can be converted into nervous *force*.” Who raises such a question as this? Its palpable absurdity does not admit of its being entertained by a physiologist for a moment. Surely, if such a question can be raised, it was incumbent on the reviewer to answer it in the affirmative, if possible, earlier in the progress of his article. He has, however, so often asserted that alcohol is “force,” is “motive force,” &c., that he now seems to think the reader will accept the implication on his part that alcohol may be “converted into nervous force,” as a proof that it is really thus converted. But the intelligent reader, who has become accustomed to our writer’s style of logic, requires no caution in this respect; and we need only to notice the statement in regard to hard drinkers living for years upon nourishment insufficient to sustain them a month without their drink.

If this be asserted of hard drinkers of alcohol merely (with water), it is unqualifiedly untrue. If it were true, however, it would be logically so much the worse for our writer ; since, if alcohol is "food" and "better than starch and sugar," is a "nourisher of force," and is "converted into nerve force," surely hard drinkers, who consume so much more than others of this multipotent substance, ought to live "vigorously," and as the most "reputable citizens." If alcohol is converted into nerve force, such people ought surely to develop the highest functions of the nervous system,—the intellectual and the moral faculties,—in a superior degree ; which is generally thought not to be the case with hard drinkers. "This paradox it was incumbent on" our reviewer "to clear up." If what he has already affirmed of alcohol were true, it would be an unpardonable sin to restrict a man who can pay for large potations to a "moderate" use of it. On the contrary, every one, by keeping his blood charged with it to the utmost extent, might elevate his moral and his intellectual nature to that angelic height, "a little lower" than which he was at first created. And for a man to be addicted to such slow food as starch and sugar,—in a word, to "eat pudding,"—would, on the other hand, be the seal of abject and perpetual barbarism. But the reviewer proceeds to say also, that alcohol offers itself to oxygen and is burned, and thus produces nerve force ; while it at the same time saves nerve tissue. Does not the reviewer know that the mere burning of alcohol in the blood produces heat alone, just as does the combustion of starch and sugar ? and that nerve force is developed by nerve tissue alone, and at the expense (wear and tear) of the latter ? If not, we tender our regrets. But his enthusiasm comes to its climax farther on, in the assertion that alcohol is also "the equivalent of blood." On this pinnacle of absurdity we leave him, with our best wishes for a safe descent.

Now in regard to hard drinkers, there are those who are constantly stupefied with alcohol, and who therefore wear out their tissues very slowly, and require but little nourishment to repair the waste. This class is formed of beer and porter drinkers more especially ; such persons requiring less food because malt-liquors contain a small amount of nourishment, in the form of albuminous matter. Liebig, however, says that "as much flour or meal as can lie on the point of a table-knife is *more* nutritious than five measures (about eight or ten quarts) of the best Bavarian beer." Our reviewer remarks upon this quotation, that the proposition is "absurd," that "a pinch of meal has greater *sustaining* power than a *quart* of beer." Liebig,

however, says, "We can prove the above statement with mathematical certainty." The reviewer also asserts, that "it is no answer to say that the force is temporary. All force is temporary." Indeed! and so is all life. He afterwards tells us, in like manner, "All excitement is temporary;" but subsequently claims in favor of alcohol that, in small doses, it is "*only a temporary stimulus*." By what term might we appropriately designate this style of subterfuge?

But there is another class of excessive drinkers who are constantly stimulated, instead of being stupefied, by the alcohol they consume; and who are therefore still active, developing motive force and nerve force at the expense of their muscular and nervous tissues. Such persons need nourishment in proportion to the waste; and in many cases the quantity is decidedly increased, instead of being diminished, by their drinking. This explanation is virtually admitted by the reviewer himself, while discussing another topic, where he says, in a style uncommonly subdued: "We think that, although the result of the stimulus *may* be a greater consumption of tissue in a given time than would have taken place without it, yet it is demonstrable that real increase of strength *is* given; that alcohol is positive nutriment, or else it could not replace nutriment, nor could it enable drunkards to subsist." Dr. Carpenter thinks precisely the reverse, and gives his reasons; and until the reviewer can offer some valid ground for his opinion, we shall adhere to Dr. Carpenter's opinion (and our own) on this subject.

Here end our comments upon the "links of the chain of demonstration;" and we believe the reader will now agree with us, that the "chain" is merely a "rope of sand," and that Physiology "shrugs her shoulder" in general, and in particular, at the "conception" that "alcohol is food." On the other hand, Dr. Carpenter has given solid reasons for regarding alcohol as essentially poisonous in its physiological effects; and with him we may very safely leave this question, till a more doughty champion enters the lists against him.

Our reviewer, however, coolly assuming to have proved that "alcohol is food," next proceeds to show "how and why it is food." It is scarcely necessary to follow him through his argument on this topic; and yet some of his illustrations are too characteristic to be omitted. "If in drinking a glass of brandy," says he, "you save an ounce of beef, it is because the same amount of force can be evolved from the brandy as from the beef." But the reader now knows that the glass of brandy, if it evolves force (as the beef is assumed to do), does not save the beef; since it thus wastes the tissue, and the beef

is just so much the more required to repair the tissue. His idea that alcohol offers itself to oxygen and is consumed, and thus saves tissue, though it nevertheless develops force, next follows : but it has been refuted on a preceding page. The great defect here, as elsewhere, is, that the reviewer makes no distinction between the calorific and the stimulant or exciting effects of alcohol ; but persists in implying that the mere burning of it in the blood produces force, instead of heat merely. The reader now knows, that whenever alcohol does offer itself to oxygen, it is merely calorific ; and that when, remaining unconsumed in the blood, it excites force, it produces a corresponding waste of tissue.

As if cherishing some misgiving, after all, in regard to his demonstration that alcohol is food, and not poison, the writer dismisses the last-mentioned topic with some very striking remarks on poisons in general ; from which we may infer that, on the whole, it is of no consequence if alcohol is a poison. He says that the human organism possesses a marvellous "aptitude in resisting and making light of poisons," and discourses thus :—

"We are all in a private way descendants of Mithridates. The water we drink, the tea we drink, the medicines we take, and the pickles—especially the pickles!—we eat, are all so many poisons. Death itself is but the consummation of a system of slow poisoning. There is tea, even when unadulterated, notoriously a slow poison ; coffee, a slow poison ; tobacco, a slow poison ; carbonic acid in the air of churches, theatres, and assemblies, a slow poison ; beer, slow poison ; wine, accelerated poison ; brandy, rapid poison."

A sufficient reply to the above is afforded by the reviewer's previous assertion, that, if alcohol were continually in the circulating current, the effect would be fatal. But he says, incorrectly, "Alcohol is not, and cannot be, constantly present in the blood ;" and, "Its temporary presence is only a temporary disturbance, and this disturbance is a stimulus." We reply, with his own logic, "All disturbance is temporary," and there is no substance whose presence in the blood is not "temporary." But we have seen that alcohol, if often taken, may be kept present in the blood for a long time ; and in numerous instances it has been found after death in the ventricles of the brain, and has burned with its characteristic blue flame. It has also frequently been extracted from the substance of the brain, when it could not be found in the ventricle or in any other part of the body. But this is a mere "temporary" presence.

We have, however, in the preceding quotation, arrived at the first distinct admission that alcohol is a stimulant ("stimulus") ; which is

in fact the only property of alcohol which makes its habitual use intensely dangerous, and upon which the whole doctrine of total abstinence rests. It is not necessary to show that alcohol is a poison; it is enough to show that it is a *peculiar stimulant*, and then to indicate in what its peculiarities consist. So long as it is merely calorific, nobody is concerned for its effects. The reviewer himself asserts, that since "life is only possible under incessant stimulus," there is no objection to alcohol unless "there is something peculiar in the alcoholic stimulus, which demarcates it from all others;" but he also admits that alcohol is a peculiar stimulus, and thus nullifies all that he has said of the other stimuli as essential. He says also, that this peculiarity of alcohol "justifies, in some degree, its bad reputation," and is one "upon which all the mischief of intoxication depends, one which causes all the miseries so feelingly laid to its door." (All this is affirmed, by implication, of *food*!) "And what," he continues, "is this peculiarity? Nothing less than the fascination of its virtue, the potency of its effect! Were it less alluring, it would not lure to excess; were it less potent, it would not leap up into such flames of fiery exaltation. In its virtue lies its crime." Observe, "virtue" here means "potency of effect." He next suggests that alcohol should be used as is a razor; and says, that "while we frighten Tommy with a rehearsal of the terrible consequences which may ensue if he venture to touch the razor, we cease the precaution when our juvenile friend emerges from jackets to the dignity of shaving," and "the razor is then placed in his hands with full reliance that he will not cut himself—often." Or, to state the idea more distinctly: We should frighten children and people of the "poorer classes" from using alcohol at all, even in a "beneficial," "moderate" way; but we should put it into the hands of "sensible persons" (the "readers of the Westminster Review") for their habitual use, "once or twice a day," with full reliance that they will not become intoxicated by it—often!

It would have been pertinent had the reviewer explained why alcohol is a peculiar stimulant. It is so because it has a peculiar attraction for the substance of the brain, and therefore commits its ravages first of all upon this organ, and consequently upon the intellectual and moral faculties. This fact is confirmed by the examination of animals killed by alcohol. Indeed, the reviewer himself admits (though for a very different purpose) "the great affinity and the *selective eagerness* with which it acts on the nervous tissue."

Professor Johnston, another chemist, is next quoted to prove that

the stimulus of alcohol is not in itself injurious, but beneficial, though the reviewer adds, "Too much of it we know to be injurious." It would have been at least kind, had he, after portraying the dangers from its use, informed the reader how much is just enough. What would we think of a professedly scientific medical writer, who should urge the use, in some disease, of a drug he admitted to be dangerous in excess, without giving us any idea of the dose in which it should be administered.

The reviewer also quotes from Professor Johnston the absurd idea, first propounded, we think, by Liebig, that alcohol, coffee, tea, &c., "diminish the waste of tissue," though an equal amount of force is developed. It is high time this absurdity were given up, even by chemists. Physiology, except as manufactured for us in the laboratory, entirely repudiates such a chimera. Our writer also adopts the saying of the "poets," that wine is "the milk of the old," and then quotes Liebig to the same effect. While we cherish the profoundest respect for Liebig as an analytical chemist, we must admit that there is a certain propriety in associating so imaginative a writer on this subject with the poets. We however by no means deny that wine is often beneficial to the aged, or to any whose weak digestive powers require its stimulating effects. We do not ourselves hesitate to prescribe alcoholic drinks when we think them needful. But we have nothing here to do with alcohol as a medicine; and therefore the authorities just referred to have no bearing on the question before us. We find, however, an admission on a subsequent page, which seems singular as coming from a writer who maintains that the use of alcohol "once or twice a day" is "positively beneficial" to a man in health. If, says he, we are "living under perfectly healthy conditions, with hereditary strength of organism, with abundance of excellent food, with stomachs equipped for efficient exercise,—in such a case alcohol is certainly of *no use*." We are happy to find the reviewer at last strictly correct, on this one point. But he adds: "In such a case alcohol in moderation can do no injury,—because of the elasticity of the organism,—and while it does no injury, it produces pleasure." The "potency" and the "fascination" of alcohol have been portrayed in dithyrambic style; we have just been told that in perfect health it is not beneficial (is of "no use"); but it is added, that so powerful an agent in such a case is also not injurious. That is, to one in health it is neither injurious nor beneficial, though so powerful. Yet we know that it is often beneficial in disease; and we should expect that it would, like other remedies, produce some

effect at any rate, and probably an injurious one, in health. Dr. Carpenter has shown that this is the fact. But alcohol "produces pleasure." We should say "excitement," instead of pleasure; but it is very true that some make pleasure to consist in excitement. Yet we have seen that in the fact that alcohol is a *peculiar stimulant* lies all the danger. Is it, however, pleasure to be excited to-day, and "sleep it off" to-night, or only "pay for it by a headache to-morrow?" Let the reader say for himself.

The closing pages of the article under consideration are devoted to the reviewer's second proposition,—“Use is not abuse;” or, “There is no *necessary* physiological connection between moderation and excess.” Of course there is no physiological necessity or reason why a healthy person should take alcohol for the first time; there is equally none for taking it the second time, or the ten-thousandth. But our writer “knows better than most people” that it is the physiological fact that moderation tends to excess,—that use tends to abuse; for he admits that “He who drinks will drink again, and moderation, we know, oils the hinges of the gate leading to excess. No one doubts the danger. The only absolute preventive against taking too much is to take none.” “Is anything more wanted” to show that, if excess does not necessarily follow moderation, there is great danger that it will? And this danger, the reviewer himself admits, can be avoided only by abstinence. We must therefore regard the reviewer as “himself maintaining” that total abstinence rests on a physiological basis, “unless he retracts his own language.” He however adds: “Stimulus [i. e. alcohol] is daily taken by thousands and thousands who do not increase the amount as they advance in life;” to which we reply, that there are millions who do increase the quantity as they advance in life. The reason is simply, that, as the organism becomes accustomed to the stimulus, a larger quantity is required to produce a given stimulating effect.

Finally, the reviewer, in taking a retrospect of his labors, states five propositions which must be proved to establish Total Abstinence as a scientific theory; but which, he says, he has entirely disproved. These we need not repeat, since with his method of proof the reader is already familiar. On the other hand, we assert that Total Abstinence may be defended upon the basis of the two following propositions alone:—1. Alcohol does not exert a beneficial effect upon the healthy human organism; and, 2. Use tends to abuse. Both these propositions have, moreover, been established by Dr. Carpenter; and the reviewer himself, as we have seen, has virtually admitted them.

We may therefore retort upon him his remark respecting Dr. Carpenter: "We have only to disentangle the confusion" of his article, "and we find him an ally."

In taking our leave of the reviewer, we merely add, that we have found that his "vulnerable points" constitute the rule, and not the exception; we have "called in the aid of logic to combat fallacies," and of "science to combat scientific errors;" and have made it apparent that he has very "confused conceptions of what, strictly speaking, must be called food." We have also exposed the absurdity of divers propositions, at which logic, physiology, and fact have "shrugged their shoulders" in turn. Finally, we have "rescued a scientific question;" and have shown, we think, that he has utterly failed to demonstrate the "Physiological Errors of Teetotalism." We have detained the reader much longer than we would have desired. But it was necessary that our wily opponent should be closely followed through the windings of his errant logic, lest he might adroitly skulk for shelter behind an inconsequent conclusion. We must, however, in justice, admit that he has laid the manufacturers and venders of alcoholic drinks under no slight obligation; and if it should be deemed expedient to publish his article in a separate form, we suggest that it be entitled, "An Essay on the Effects of Alcohol; for Distribution by Brewers and Distillers."

Before finally dismissing this subject, we would enter our protest against the carelessness of remark—if it deserve no severer epithet in which some medical men are accustomed to indulge in regard to the physiological effects of the habitual use of alcohol. No writer but a thorough physiologist can do justice to this subject. Yet we often hear announced, in a magisterial style, opinions on this subject which are utterly opposed to facts and to physiology. When a physician sets the example of the daily use of alcoholic drinks, and assigns as the reason, that he, though in health, requires the beneficial physiological effects of alcohol, it really becomes a matter of charity, if we suppose him sincere, to instruct him that no *valid* physiological reason has been or can be given for the notion that the habitual use of alcohol is beneficial to a person in health. We have no quarrel with him who drinks habitually; that is not our affair. But let him not impress Physiology to screen him in the practice. She abhors such service. Let him not "drink on pretexts;" but frankly admit that he drinks merely for the excitement alcohol produces; that he incurs a risk in so doing, hoping to avoid the so frequent consequences; but that he would not advise another to do the

same, lest he might yield to the temptation. This is fair and honorable; and this is the only ground that medical men who habitually drink alcoholic liquors can take, without impeaching either their knowledge or their candor. We confess ourselves indignant, when we see Physiology distorted and mutilated till her most intimate disciples can scarcely recognize her, and then debased to do battle against a cause emphatically her own; and we have no excuse for those who, whether prompted by ignorance or by their own interests, thus lay unholy hands upon her. In her behalf would we address to all such the blended supplication and command of the Sibyl,—

“Procul, O, procul este, profani!”

PROCEEDINGS OF SOCIETIES.

NEW YORK MEDICO-CHIRURGICAL SOCIETY.

Reported for the Monthly by J. O. BRONSON, M.D., Secretary.

May 27. The President, Dr. Henry G. Cox, in the chair.

Dr. Uhl presented before the Society a stomach, showing the effect of adulterated liquors. The whole mucous surface exhibited a remarkably intense redness, with no disorganization of the membranes. The woman from whom it was removed had been an habitual drunkard for twenty years. For the last few weeks of her life she had been more intemperate, if possible, than formerly, and finally in a drunken fit had died. No other organs were found diseased, with the exception of the kidneys—they being a little injected. In presenting this specimen the gentleman asked the question, from what cause do deaths of this kind result?

Dr. E. H. Parker was of the opinion that death resulted from nervous exhaustion.

Dr. Cox expressed coincidence in that opinion, and in noticing the specimen stated that it did not exhibit the appearance of a stomach of one who had been a continual drinker; but from its intense redness he should be led to believe that the person had taken some poisonous fluid—as was probable, since the woman was of such a character as would be likely to drink adulterated liquors.

Dr. Carnochan called attention to a tumor, which he had that day removed from a woman 22 years of age. Some sixteen or seventeen years ago, the tumor was first noticed upon the mam-

mary gland, and being quite small, but little attention was excited. It continued to increase slowly, attended with but slight pain, until it attained its present size of a goose's egg. The patient presented no cachectic appearance. The integument over the tumor wore a bluish aspect, but was not adherent to it. The tumor presented a sense of fluctuation, resembling an encephaloid body. After carefully considering the case, however, Dr. C. decided, from the definite character of its growth—the length of time in development—the non-sufficiency of fluctuation for encephaloid—that it was a benign growth, and would not be renewed if removed, and consequently proceeded to dissect it from its position. The tumor, upon being divided, presented to the eye the appearance of malignity.

Dr. E. H. Parker, in noticing the specimen, spoke of the malignant appearance, especially of the central portion, but this he thought might be due to pressure; and, upon inquiry of Dr. Carnochan, learning that the patient had been in the habit of wearing tight corsets, he would attribute it to that cause, inasmuch as the great length of time it had been growing, together with the other symptoms, would most certainly guaranty the surgeon in his diagnosis and prognosis. Dr. Parker related a case occurring in his practice some seven years ago, wherein he removed a tumor from the breast of a woman, which had existed five years, presenting many of the appearances of the specimen exhibited, especially in the centre. The tumor had been subjected to pressure, which had undoubtedly caused the peculiar appearance. Lancinating pains had accompanied its development, and the nipple was retracted. He, however, considered it non-malignant. Time had shown his prognosis correct, inasmuch as but a short time since he saw the patient, and there had been no renewal of the tumor, nor new growth in any other part of the system.

June 10. *Dr. Conant* presented the arm and forearm removed from a subject in the dissecting room, unaccompanied by a history. At the articulation were exhibited signs of previous inflammation, exostosis having occurred at various points, and especially around the head of the radius, the annular ligament having been destroyed. The cause of this abnormality could not, of course, be explained; yet the condition well accounted for the loss of action, as seen in the member previous to dissection. The ginglymus action was slight, and pronation and supination destroyed—the forearm being fixed upon the arm at an angle of about thirty degrees.

Dr. Budd presented a biliary concretion of great size, measuring

one inch in its short, and one inch and seven-eighths in its long diameter. Added to the interest which size gave it, was the fact of the absence of any indication of its existence during the life of the patient from whom it was removed. It was discovered in making an autopsy of the body of a female, eighty years of age, who had died of apoplexy. The gall bladder contained nothing else, and closely clasped the concretion.

Dr. Conant considered the size of the concretion to be the reason of no symptoms to indicate its presence, as it prevented passage into the duct.

Dr. Budd inquired as to the probable cause of biliary concretions. He was referred by *Dr. Douglas* to "*Precis des Maladies du Foie et du Pancreas de M. Fauconneau Dufresne*," which has lately appeared from the French press. After some further remarks upon the specimen and its like, observation was directed to the subject of apoplexy, by an inquiry as to whether apoplexy ever occurred where the vessels were not diseased.

Dr. Budd stated, that in the case just under consideration clots were found in both lateral ventricles, but no disease whatever could be discovered.

Dr. Conant thought it might occur, and related a case of a woman who died of apoplexy in twelve hours, after a hard day's labor. Upon examination, no disease could be discovered in the arteries; yet a rupture of one in the right optic thalamus was found. Cicatrices were found in the lungs, tumors in the uterus, and otherwise the woman was diseased. The arteries were everywhere healthy.

Several specimens were then exhibited by *Dr. Benjamin Lee*. In the first place, a heart and stomach from a man eighty years of age. He had been brought to the "Home" in a state of stupor, from which stimulants were unavailable to arouse him, and he soon died. The stomach was found thickened near the pylorus, and in the vicinity were several tumors beneath the mucous coat, the largest of which measured about three-quarters of an inch in diameter. Sprinkled throughout the organ, also, was a pigmentary deposit. No microscopic examination of the specimen had been made. The gentleman, however, looked upon the tumors as tuberculous.

While the man lived, auscultation at the præcordia discovered a bellows murmur. The heart, when seen, exhibited peculiar, strong, fibrinous concretions in both ventricles, adhering to the valves. Atheroma appeared for some distance along the aorta. *Dr. Lee* expressed himself as believing these concretions were forming for

some hours previous to death. They were unlike those usually found in the hearts of persons dying, for instance, from phthisis.

Dr. Cox related an instance of a child, affected with pneumonia, who was greatly oppressed for breath apparently, and exhibited puffiness and congestion of the face, resulting from such a condition. Thirty-six hours before death occurred, auscultation over the heart discovered abnormal murmurs, and twelve hours before death, the sounds were found blended. Post-mortem examination revealed no other lesion than the pneumonia, which was insufficient to produce death. In both ventricles of the heart, however, concretions, similar to those exhibited by *Dr. Lee*, were found.

Referring back to the stomach accompanying the heart, *Dr. Conant* remarked that he looked upon the tumors as malignant, and the pigmentary deposit as melanotic.

Continuing with his specimens, *Dr. Lee* exhibited the heart, a portion of the ileum, and the appendix vermiformis, from a man twenty-five years of age, a victim of phthisis. The specimens showed how widely disseminated had been the tuberculous deposit. The ileum showed the glands of Peyer affected; and the appendix at its terminal portion, showed the disease passed into a state of softening.

No other specimens being presented, nor papers offered, *Dr. Benjamin Lee* related the two following cases, occurring at the "Colored Home":—

CASE 1.—*Accouchement.* Nancy Davis, aged 19, primipara, of nervous temperament, began to feel slight pains on Friday, June 6th, at about noon, which continued steadily until evening, when I made a vaginal examination, but was unable to touch the os, partly owing to her resistance, and partly owing to anterior obliquity. The head was presenting in the left occipito iliac position. Complained of not having slept for two nights. Gave Pulv. Dov. and Camph. The pains continued with regularity, but with varying violence until Saturday night, when they became very severe. At this time I was able to reach the os, high up, and dilated to the size of a shilling piece. Patient very nervous and pulse irritable. Gave Hyoscyamus and camphor, and, later in the night, a dose of castor oil, which, however, was soon rejected by the stomach. At 7 o'clock next morning, the nurse sent down word that the waters had broken. Found the membranes ruptured; head low down in the pelvis, but os not dilated farther than to a diameter of $2\frac{1}{2}$ inches. Ordered an enema of Tart. Ant. gr. ij in aq. \mathfrak{z} ij. Was sent for again in fifteen minutes, and found the child in the bed.

CASE 2. Remarkable Aneurismal Development.—Margaret Simpson, aged 62, black, for 20 years past has been troubled with palpitations and dyspnoea, and for five years with "lumps on the neck and arms," which "troubled her by their beating."

Auscultation over the heart reveals loud sawing murmurs with musical whistling over the tricuspid and pulmonary valves, heard during the first sound—slight blowing with second sound, heard more distinctly over the aorta. Impulse strong.

On the left side there exist aneurismal tumors, on the common and external carotids, each of the size of a filbert; a small one on the submaxillary, just at the edge of the jaw; a moderate sized one on the subclavian, just before it dips under the clavicle; one as large as a filbert in the axilla; a small one at the upper third of the brachial; a good sized one at the lower end of the brachial, just before it dips under the muscle at the bend of the elbow; two small ones in the course of the radial; a very small one on the superficialis volæ; and on one of the small branches on the back of the wrist.

On the right side a similar condition exists. A large tumor is found on the carotid, an inch below the bifurcation; and one at the bifurcation; a very prominent one of moderate size on the inferior thyroid; an anastomosing aneurism on the temple; two on a small branch in front of the ear; one on the subclavian at about its middle; two as large as filberts on the axillary; a rather smaller one at the junction of the axillary with the brachial; a small one at the middle of the brachial; and one at its lower extremity; a small one at the bifurcation of the radial. She complains of a beating on the right of the median line, at about the middle of the lumbar region, deep in. The stethoscope reveals a dull pulsating sound, very faint, rendering it probable that there is also dilatation of the right common iliac. The whole number of tumors perceptible to sight and touch is twenty-four. It is probable that more exist; she, however, assures me that there are no tumors on the lower extremities.

June 24. *Dr. Benjamin Lee* presented some morbid specimens. The first was that of an abnormal heart—exhibiting the foramen ovale still unclosed—removed from a colored man eighty years of age, who had died from introcranial effusion. Auscultation during life discovered a slight bellows murmur, which was attributed to a deposit upon the aortic valves.

In the examination of this specimen doubts were expressed by *Dr. Conant* as to the condition being natural, as it might be the result of a rupture.

In answer to this, *Dr. Cox* called attention to the perfect appearance of the border of the foramen, the existence of no inequalities, and lack of any appearance indicating violence ; together with the fact, that several cases were on record, where life had been prolonged for a considerable time, with as much abnormality existing in the organ as in the specimen under consideration. Although 80 years had been attained by the man from whom the heart had been removed, he was of the opinion that the organ was abnormal from infancy.

Dr. Lee exhibited a tumor removed from the substance of the lung of a victim of phthisis, 25 years of age, the character of which he was unable to determine. The tumor was found in the apex of the right lung, and measured about an inch in diameter. The other portions of the lungs showed tuberculous deposit in various stages of development and degeneration. Some remarks were elicited, the general tenor of which was presumptive of the tuberculous character of the specimen.

Dr. Carnochan then presented the trunk of the second branch of the fifth pair of nerves, about one inch and a half in length, exhibiting signs of inflammation, both in color and size, it being much thickened.

The man from whom this portion of nerve was removed, was the victim of neuralgia for the space of seven years. He is a mechanic, forty-seven years of age, of nervo-bilious temperament. He first noticed the beginning of the disease in 1849. The pain increased in intensity, after a period of cessations, until the next year, when he had every tooth extracted from the superior maxilla, hoping to thus obtain relief ; but in vain. Equally vain were all the efforts made with various medicines for the space of a year and a half. In February, 1852, *Dr. J. Watson* operated by dissection of the entire cheek from the superior maxilla, with relief for the space of six or eight months, when the paroxysms returned, and he was again operated upon by the same surgeon, by division of the nerve at the infra orbital foramen. Obtaining relief for a period of time, he was freed from the necessity of another operation until January, 1854, when *Dr. W. Parker* operated in the same way as *Dr. Watson*. After a time *Dr. Detmold* operated, but no good effect following, the man consulted *Dr. Mott*, who operated at three different times, with no permanent relief.

In June, 1855, the man consulted *Dr. Carnochan*, who, finding therapeutic means of no avail, concluded to operate. The patient being put under the influence of chloroform, incisions were made, and a V

shaped flap dissected up, and turned toward the orbit. The foramen being found, it was with difficulty the nerve could be isolated, on account of the hard, extensive cicatrix, resulting from seven different operations. This being done, however, a small piece of bone was removed from the edge of the orbit and a part of its floor, laying open the canal and exposing the nerve to the extent of about a quarter of an inch. That portion of the nerve was then excised. From this operation the man recovered, and remained free from any return of the pain until March 11th, 1856, when he appeared, suffering severe pain along the alveolar border of the superior maxilla, and the surface of the malar bone. The paroxysms were violent in the extreme. The slightest touch of the superior labium on the left side awakened the most acute pain.

On the 21st of March, by appointment, a second operation was performed. The patient was placed under the influence of chloroform. An incision was then made from the tuberosity of the malar bone to a point midway between the labial tubercle and angle of the mouth on the left side. With a trephine, then, an opening was made into the antrum of Highmore, which being perfected, the floor of the infra orbital canal was removed by means of a hammer and chisel, the posterior wall of the antrum was also removed, and the nerve was thus laid bare in the spheno-maxillary fossa. Seizing the nerve with a pair of forceps, it was excised close to the foramen rotundum. The removed portion was much thickened and inflamed. The membrane of the antrum was also in a diseased condition, being heightened in color and very sensitive. Beside the removal of the nerve, a portion of the alveolar border of the maxilla was cut away to destroy the branches of the nerve which had given rise to the pain referred to that region by the sufferer. The pain has not as yet returned, and the parts are healed, as can be seen. The patient was present and those interested had an opportunity of examining the parts.

Dr. Casseday exhibited a leg which had been amputated by Prof. Carnochan at its upper third, showing extensive injury—the result of a railroad accident. Attempt had been made to preserve the limb intact, but reparation not going on, amputation was demanded and accordingly executed. An examination of the removed portion displayed far more complication than had been seen or supposed. The condition well accounted for the doubtful diagnosis.

Accompanying this specimen was an articulation of the knee showing extensive disease, the result of synovitis. The man, twenty

years of age, who had suffered the loss of his limb, in July of last year received a slight injury to his knee in getting out of a railroad car. He continued at his labor, however, for the space of nearly six months, when he entered the hospital with severe synovitis. Every measure adopted for his relief was of no avail. The knee grew worse, and the patient was evidently sinking. After consultation, amputation was effected. The man lost his leg but saved his life.

A specimen of caries, also exhibited by *Dr. Casseday*, attracted considerable attention. The following notes accompanied the specimen :—

This case of caries is one of long standing. The patient is now 38 years of age, an Irishman, and a laborer. He says that the leg began to trouble him at about the age of 16 years. The disease began by a swelling of the leg, which was treated by a country physician by incision and poultices; and the treatment was nearly successful, for he suffered but little inconvenience for some time. He came to New York, when he received an injury of the leg, and the disease came on again; but the skin was not yet ulcerated. He then went to the New York Hospital, and was treated there and discharged, cured. He then received another injury, and not wishing to go to the Hospital he remained at home, without any treatment whatever. The disease, after this, increased until the bone was involved, and so far diseased that when *Dr. Dunham Green*, whose case it was, saw it, the lesion was irreparable, and amputation was resorted to. I forgot to mention that during the latter part of the disease, sequestra were thrown out. The operation was performed in February last (1856), by *Dr. Green*, in the presence, and with the assistance of *Prof. Carnochan*, *Drs. Proudfoot*, *Brundidge*, and some others, myself among the number. The stump healed kindly, and in three weeks after the operation the patient was able to walk around the square on which he lived.

The bone presented has the appearance of cancellated structure throughout its entire extent, and the disease must have been wholly incurable. There is a large exostosis along the entire fibula, which is united to the carious tibia firmly, by bony union.

Besides these specimens, a humerus, showing a very fine union after a fracture, was presented by *Dr. Casseday*, as interesting in its exhibition of the beautiful manner in which nature had reconstructed the tissue.

The same gentleman also presented five steatomatous tumours, removed from the scalp of a woman at one time. The largest of the tumors was about an inch in diameter. Some remarks were made upon the peculiarities of those growths.

NEW YORK PATHOLOGICAL SOCIETY.

Reported for the MONTHLY by E. LEE JONES, M. D., Secretary.

June 11, 1856. *Dr. Alonzo Clark* reported on the case of tumors of the eye, exhibited at the last meeting of the Society, by *Dr. Wm. Detmold*. The optic nerve itself was not implicated in the disease. The tumor seemed to be composed of two distinct parts, one light, and the other dark ; in the centre of the light portion is a dark spot. A fibrous tunic invests the tumor.

Microscopic examination shows it to be entirely composed of that variety of cell, now denied to be cancerous, the "double caudate corpuscle of Muller. He could not divest himself of the idea, that these tumors were of a malignant nature ; and those holding a contrary opinion, admit their not unfrequent reproduction, a marked characteristic of malignancy. In the dark portion, hæmatoidine exists in great abundance ; and in fact the whole tumor is more or less darkened by its presence.

Dr. Clark next presented a specimen sent to him by *Dr. Burdett* of the Flatbush Hospital. It is a fibrous tumor on the exterior of the fundus of the uterus, weighing 18 pounds.

It is composed of two distinct portions—one part hard, the other soft ; the two blending together in such a manner as to render it impossible to determine where the one ends and the other commences. Near the central part of this large tumor were cysts containing several ounces of serous fluid.

Now what is the nature of the soft portion ? Is it cancerous ? If so, we have a solution of a point, often the subject of discussion at our meetings, whether fibrous tumors ever assume a malignant character. This softened portion, so far as its general appearance goes, may be encephaloid cancer, or the soft variety of fibrous tumor. But with this tumor was brought the liver, 16 pounds in weight, which contains several masses, large and small, of what will hardly be doubted is encephaloid deposit ; and have the same vascu-

larity and general consistence as the softened portion of the uterine tumor, and seem to be of the same character.

The microscopic examination was not entirely satisfactory, except as demonstrating the two deposits as identical in nature; if one is cancerous, the other is—both being constituted mainly of fibres and cells, the latter of large size, more or less fatty, more or less rounded; the nuclei, in most instances, obscured by the brownish opacity produced in them by the alcohol, in which the specimen had been macerated, or otherwise wanting.

If so, then here is an instance showing the degeneration of fibrous into malignant growths.

Nothing of importance occurred in the progress of the disease. It was removed from a colored woman, 40 years of age, who first became aware of the existence of the uterine tumor about seven years since.

The softened portion being about one-fifth of the whole mass, appeared mainly as one large mass, but there were numerous softened spots, in the substance of the tumor, of small size.

Dr. McCready presented a specimen of ulceration and perforation of the appendix vermiformis, from hardened faeces.

On Wednesday, June 4th, he was called to visit a slight, somewhat delicate boy in appearance, though habitually enjoying good health. Two days previous, immediately after dinner, he had eaten a large piece of cocoa-nut. From that time he had suffered colicky pains in the bowels. He had vomited slightly, and a dose of castor oil had been administered, which had acted freely. He was found with a cool skin, and a tranquil expression of countenance; the tongue clean, the pulse about 100, and without tension. The pain complained of was aggravated at intervals, and was located in the epigastric and right hypochondriac regions. He complained of tenderness on pressure; but when it was made gradually, he bore it well. A dose of calomel and Dover's powder was ordered, to be followed in the morning by a mixture of rhubarb and soda. The medicine operated freely, but without affording relief. Morphine in full doses was now prescribed, and the pain was for a time alleviated, and the pulse reduced in frequency. The pain, however, returned, and the pulse rose to 116. The abdomen was slightly swollen, and the tenderness referred to, in the same region as before, was somewhat increased. He complained that it hurt him to rise, or to turn in bed. This, however, was not constant, since he, on different occasions, turned and raised himself to a sitting posture, at my request,

without complaint. The decubitus was natural, generally on the side ; legs were not drawn up ; the countenance was natural and the skin soft. He was put on the use of calomel and opium : two grains of the former, with a half grain of the latter, being ordered every three hours. The opium, as is frequently the case, diminished the secretion of urine, and also produced slight retention ; the patient passing it but once in 24 hours.

On the morning of Sunday, June 8th, Dr. Gurdon Buck saw the child, in consultation. The symptoms had not materially altered ; the pulse ranged from 116 to 120, and was soft, and of moderate fulness ; the tongue clean ; the skin, countenance, and decubitus natural. As the bowels had not been moved for nearly three days, a large enema, with a spoonful of castor oil was ordered, and warm fomentations to the abdomen, which had previously been applied, were continued. On visiting the patient at 1 P. M., his countenance was sunken, and pulse very frequent, and scarcely perceptible. The skin was bathed in perspiration, and there was some coldness of the extremities. The pain was gone, and the little patient moved freely in all directions. Soon after the administration of the enema, he had a large watery evacuation, and had passed urine freely. This was followed by vomiting of a quantity of dark, green-looking fluid.

During the afternoon and evening, the vomiting recurred several times ; and acute pain in the abdomen was complained of. The child became exceedingly restless, tossing about in bed ; the extremities colder ; the countenance more livid and sunken, and he finally expired at about three o'clock on the morning of the 10th.

Post mortem examination, 14 hours after death. *Abdomen*.—On opening the abdomen, it was found filled with a considerable quantity of sero-purulent fluid. The intestines were universally glued together by soft adhesions, which were readily broken up. In several places where two folds would be adherent, there would be at the place of adhesion a dark brown, circumscribed patch, with a well-defined margin, resembling so closely the appearance of gangrene after strangulated hernia, as to be at first taken for gangrene by Dr. Buck.

The intensity of the inflammation was evidently greatest about the hypogastric region, and raising the intestines from the pelvis, the effused fluid was found there of a darker color, having a brownish tinge. There was, however, no feculent odor.

Amid the mass of large intestine which dipped down into the pelvis, the appendix vermiformis was found, intensely inflamed, much

enlarged, and having a flattened appearance. It contained a concretion about the size of a swollen white bean. No perforation was noticeable. On being laid open, the mucous membrane of the appendix was intensely inflamed. The inflammation extending to the neighboring large intestine, the follicles of which were enlarged and prominent. The concretion consisted apparently of a small feculent mass which had formed itself around two or three minute whitish bodies about the size of strawberry seeds. The appendix, with the caput coli, was removed, and, after maceration one hour in water, several minute ulcerations were evident; one of which, about the size of a pin's head, had perforated into the abdominal cavity. The other organs were not examined.

Dr. Finnell presented an instance of rupture of the small intestine, from violence. The patient from whom this was obtained, was 30 years old, a stout, healthy man, who was violently beaten about the head, and kicked in the abdomen. He instantly complained of severe pain in the bowels, sickness at stomach, and great prostration of strength. In a few minutes he recovered sufficiently to walk home a distance of several blocks. The pain still continuing, a physician was called, who attended him up to the time of his death, which took place 13 hours after the injury.

The autopsy revealed extensive peritonitis, and a circular perforation about the size of a five cent piece was found in the ileum about three feet from the cæcum. The contents of the intestine passing into the peritoneal cavity, producing inflammation and death.

Dr. Finnell then presented several specimens from a man, who died of pneumonia. There was found an ununited fracture of both bones of the forearm, with extravasation of blood in the muscular substance. Over the surface of the spleen were small rounded bodies, of an uniform size, hard and white. Over the pulmonary pleura were scattered 20 or 30 of the same bodies, and also over the surface of the liver; they did not penetrate the substance of the organs. No cancer or tubercles were observed in the lungs. There was also a depression of the frontal bone. He has been subject to epilepsy for 25 years. No reliable account of the case could be obtained.

A second specimen of ulceration of the appendix verniformis was presented by *Dr. Enos*, who obtained it from a girl 7 years old, who complained first of pain in the bowels. Supposing it to be intestinal irritation, he administered a cathartic; no relief followed. Inflammation then set in actively, with pain,—rapid pulse. These symptoms increased and she died on the third day.

Sero-purulent fluid in abundance was found in the abdominal cavity. The appendix was perforated at its junction with the caput, by a mass of impacted fæces. The opening was on the cœcal side of the foreign body.

CHRONICLE OF MEDICAL PROGRESS.

Tracheotomy in a Mule. By WM. D. ANDERSON, M.D.

It is now more than twelve months since the following novel, rather amusing, as well as interesting, incident occurred :—

Called to a patient, an overseer on an adjoining plantation, my attention, as I entered the gate, was arrested by the extreme suffering and dying agonies of a mule, large and fine, still upon his feet, staggering and reeling as he endeavored to keep the company of others, in the same small lot, which were so frightened by the mixed and unnatural screaming and roaring of the beast, that they fled in terror to avoid him. Every hair on him wet, his mouth elevated, jaws open wide, and gasping for breath, his condition, and attitude, and struggles, were articulate in imploring aid. I believed it could be given, if done instantly. At that moment the proprietor of the plantation rode up, and with intense earnestness ordered a *drench* quickly. I told him that a drench would be useless, but that if a man were the subject, I thought he might be relieved. He replied, that what was good for man, was also for the horse. I proceeded quickly (the mule being down), to cut down upon the trachea, at about its upper two-thirds, opened it by a longitudinal incision of some three or four inches. This was done in less than five minutes from my first sight of him; but the mule was already dead. "You are too late," remarked the owner. With regret I replied, "So it seems." Having my fingers in, and spreading the trachea, removing the coagula of blood, I imagined that I felt a gentle rushing of air, and in a minute more the most rapid and violent ingress and egress of air through the artificial opening was going on, like an engine working off steam. The mule was directly upon his feet. A section of a cow's horn answered as a tube, and in less than thirty minutes from the operation, the mule was eating, breathing, and apparently doing as well as ever. He made a quick and perfect recovery.

His disease was Distemper, affecting the throat, and closing it either by effusion in the submucous cellular tissue lining the larynx

(œdema glottidis), or by the faucial and pharyngeal tumefaction; or possibly all existed together.

I am aware that your excellent journal is not precisely the medium for such a paper. I know, however, of none other, except it be the popular, and as the article claims neither to be professional nor popular, and more especially as no serious loss can result to the world of either men or mules, from its suppression, I cheerfully submit it to your discretion.

Tensas Parish, La., Jan. 28, 1856.

Addendum by B. Dowler, M.D.

Veterinary colleges scarcely exist in the United States; though it appears that laudable efforts are now directed towards the establishment of these institutions in Philadelphia and Boston. In France there are several, and in other parts of Europe there are many veterinary schools, thoroughly organized and wisely supported by the different governments, thereby affording the cultivators of veterinary medicine the means of a complete education, without which the cattle-doctor can, no more than the human-doctor, practice successfully his very difficult and most useful vocation. Until veterinary practitioners, duly qualified, shall be established in every town, the physician should not think it beneath his dignity to afford surgical and medical relief to the inferior animals, in so far as he may be qualified in this behalf.

Whether the human race be regarded as consisting of one or several species, its differentiae are quite restricted as compared with the inferior animals; yet, nevertheless, these latter illustrate human anatomy, physiology, and pathology.

The diseases and the post-mortem examination of animals, afford the country physician advantages inferior only to those of the city hospitals. Human physiology has been to a great extent founded upon observations and experiments upon the inferior animals. Comparative physiology, anatomy, therapeutics, surgery, and pathological anatomy, thus developed, are of great value to the physician.

The hygiene, food, drink, lodging, crowding, ventilation, exposure to heat, cold, and humidity; the acclimation, health, diseases, and remedies of cattle, all contribute to illustrate the science of medicine.

The pneumonia of hogs, for example, I have found to correspond with that of man in pathological anatomy. Perhaps the best specimen of anæmia I have met with, was in the vivisection of an alligator, in which the entire tongue and all the soft parts of the inferior

jaw had been, probably many years before, cut away. The animal, thin, and weak, had scarcely a tinge of redness in the blood, doubtlessly because he had not been able to procure and swallow a sufficiency of food in a mutilated condition.

Cattle epidemics (epizootics) deserve to be carefully recorded for their intrinsic importance, as well as for their possible value in illustrating endemics and epidemics proper.

In January, 1845, the public journals recorded an extensive and very fatal epidemic among fishes upon the Atlantic coast, from New England to the Southern States, extending over a belt of water from one to three miles broad. In April of the same year the fish died in great numbers in the Lake Pontchartrain, and in the canals connecting it with New Orleans. The stench from these decomposing fishes was deemed a nuisance and dangerous to health; whereupon the municipal government ordered that these dead fish should be interred. Hydropathy, or the water-cure cannot, as it seems, always cure fishes of fevers or other diseases. Two or three years before this great mortality among fishes, a similar mortality was reported as having been very fatal to the red-fish upon the coast of Texas, particularly at Galveston. In May and June of the year 1851, great sickness and mortality prevailed among the fishes of the Lower Mississippi, particularly among the catfish family, many of which were found dead with upturned sides and abdomens, floating; others feebly swimming at or near the surface of the river in a dying condition.

The aetiology of epidemics termed epizootics among animals presents problems in the history of morbid causation, the solution of which is hoped for, rather than found. The epidemics which affect man, do not always simultaneously affect beasts, except in rare instances, though both classes suffer from diseases which, to a considerable extent, are identical; as affections of the throat, lungs, brain, bowels, skin, eyes, &c., including inflammations, fevers, dropsies, anæmia, debility, hypertrophy, atrophy, palsy, spasms, plagues, and the like. It may, therefore, be repeated, that it is the duty of humane physicians, particularly in the country remote from veterinary surgeons, to pay strict attention to such diseases and surgical accidents as may fall under his observation among animals. Physiologists have availed themselves of the highly important scientific advantages derived from experiments and vivisections; while from the same source pathologists, therapeutists, and pathological anatomists may

learn much as to hygiene, sanitary regulations, diseases, treatment, and post-mortem examination—which must also be useful in the ordinary course of daily practice.—*N. O. Med. and Surg. Journal.*

Removal of two pieces of a large Sewing Needle from the Thigh, after remaining there forty-five years. By JOSEPH R. SMITH, M.D., of Elgton, Alabama.

On the 9th of Feb., 1856, Mr. Ebenezer Byram, aged 56 years, presented himself at my office for the purpose of having his thigh examined, which, he said, was swollen, as his physician told him, from the "fever settling in it," he having had a spell of typhoid fever some twelve months previous. On exposing the limb, I found the thigh on its external side, much swollen, red, and inflamed; the surrounding parts being quite hard, and about the centre of the thigh on its external side was a small soft space about the size of a silver dollar, which fluctuated on percussion, showing that a quantity of matter was contained within. I plunged a large abscess lancet into this soft space, and discharged about a gill of thin, yellowish fluid. I then introduced the probe, and after searching for some time, felt the probe grate against some foreign body. I immediately withdrew the probe and introduced a small pair of forceps and laid hold of the substance, and withdrew two bits of what appeared to have been a large sewing needle; each piece was near three-fourths of an inch in length. After introducing a tent, and dressing the wound, I made inquiry concerning his previous history. He informed me that, when about eight years of age, he had what his parents called white swelling; the symptoms then were great swelling, pain, and redness of the thigh, which continued to trouble and pain him for twelve months; but at no time did it ever discharge matter, but gradually subsided, and at the end of twelve months he suffered little or no inconvenience from it, except on sitting in "a certain manner" in a chair, or in riding on horse-back if he pressed the parts "a certain way," they would feel as though something were sticking in him; these continued to be his symptoms up to September, 1855, when the pain, redness, and swelling increased and gave him so much trouble, as to induce him to seek advice; and the above is the history and the result.—*Ibid.*

Memoirs of the celebrated Dr. Harvey; from Notes collected from the Bodleian Library and Ashmolean Museum.

[From the London Medical and Physical Journal, for February, 1815.]

Gul. Harveus, An. ætat. 10, in Schola Cantuar. primis doctrinæ rudimentis imbutus; 14, Col. Gonvil. et Caii Alumnus; 19, peragravit Galliam et Italiam; 23, Patavii Præceptores habuit Eust. Radium, Tho. Minad. II. Fab. ab Aquapend. Consul Angl. 16* fit; 24, Doctor Med. et Chirurg. Reversus Lond. praxin exercuit. et uxorem† duxit; 25, Coll. Med. Socius; 37, Anatom. et Chirurg. Professor; 54, Medicus Regius factus. Scripsit de Motu Sanguinis, et de Gen. Animal. Obiit 30 Jun. MD.CLVII. Ætat. 80.‡ (But I well remember that Dr. Alsop, at his funeral sayd, that he was eighty wanting one; and that he was the eldest of nine brethren.)

He lies buried in a vault at Hempsted in Essex, wch. his brother Eliab Harvey built, he is lapt in lead, and on his breast in great letters DR. WILLIAM HARVEY. I was at his funeral, and helpt to carry him into the vault.

In the library at the Physitian's Colledge, was the following inscription above his statue, (which was in his doctorall robes.)

GUL. HARVEUS, NATUS A. D. 1578, Apr. 2. Folkston, § in Com. Cautii, Primogenitus Tho. Harvei et Joannæ Halk. Frat. Germani. Tho. Jo. Dan. Eliab. Mich. Mat. Sorores Sarah, Amey.

Under his white marble statue, on the pedestall, thus,

GULIELMO HARVEO,
Vivo,
Monumentis suis immortalī,
Hoc insuper
Coll. Med. Lond.
Posuit
Qui enim SANGUINIS MOTUM
(ut et ANIMAL ORTUM) dedit
meruit esse
STATOR Perpetuus.

* Sic. Edit.

† Smyth.

‡ Over Dr. Harvey's picture in a great parlor under the library, at the Physitians' College at Amen-corner, [burnt.]

§ Borne in the house which is now the post house, a fair stone built house, which he gave to Caius Coll. in Cambridge, with some lands there, in his will. His brother Eliab would have given any money or exchange for it, because 'twas his father's and they all borne there, but the doctor (truly) thought his memory would be better preserved this way, for his brother has left noble seats and about 3000 pounds per annum at least.

Dr. Harvey added (or was very bountiful in contributing to) a noble building of Roman architecture (of rustique work with Corinthian pillasters) at the Physicians' College aforesaid, viz., a great parlour, a kind of convocation-house for the fellows to meet in belowe ; and a library above. On the outside, on the freeze, in letters three inches long, is this inscription, *SUASU ET CURA FRAN. PRUJEANI, PRÆSIDIS, ET EDMUNDI SMITH, ELECT. INCHOATA ET PERFECTA EST HEC FABRICA. AN. MDCLIII.*

All these buildings and remembrances were destroyed by the general fire.

He was always very contemplative, and the first yt. I heare of yt. was curious in Anatomic in England. He had made dissections of frogs, toads, and a number of other animals, and had curious observations on them, which papers, together with his goods, in his lodgings, at White-hall, were plundered at the beginning of the rebellion, he being for the king, and with him at Oxon, but he often sayd, that of all the losses he sustained, no griefe was so crucifying to him as the losse of these papers, wch. for love or money he could never retrieve or obtaine. When K. Ch. I. by reason of the tumults left London, he attended him and was at the fight of Edge-hill with him ; and during the fight, the Prince and D. of Yorke were committed to his care. He told me that he withdrew with them under a hedge, and tooke out of his pockett a booke and read ; but he had not read very long before a bullet of a great gun grazed on the ground neare him, which made him remove his station ; he told me yt. Sir Adrian Serope was dangerously wounded there, and left for dead amongst the dead men, stript, which happened to be the saving of his life. It was cold clear weather, and a frost that night ; which stanchd his bleeding, and about midnight, or some hours after his hurt, he awak-ed, and was faine to drawe a dead body upon him for warmth sake.

After Oxford was surrendered, which was 24 July, 1646, he came to London, and lived with his brother Eliab, a rich merchant in London, on — hill, opposite to St. Lawrence, Poultry, where was then a high leaden steeple, (there were but two, viz : this and St. Dunstan's in the east,) and at his brother's country house at Roehampton. His brother, Eliab, bought about 1654, Cockaine-house, now (1680) the Excise Office, a noble house, where the doctor was wont to contemplate on the leads of the house, and had his severall stations, in regard of the sun, or wind. He did delight to be in the darke, and told me he could then best contemplate.

He had a house heretofore at Combe, in Surrey, a good air and prospect, where he had caves made in the earth, in which in Summer time he delighted to meditate. He was pretty well versed in mathematiques, and had made himself master of Mr. Oughtred's Clavis Math. in his old age; and I have seen him perusing it, and working problems not long before he dyed, and that book was always in his meditating apartment. His chamber was that room which is now the office of Elias Ashmole, Esq., where he dyed, being taken with the dead palsey, which took away his speech; as soon as he was attacked, he presently sent for his brother and nephews, and gave one a watch, another another thing, &c., as remembrances of him. He dyed worth 20,000 pounds, wh. he left to his brother Eliab. In his will, he left his old friend, Mr. Tho. Hobbes, 10 pounds, as a token of his love.

He was wont to say, that a man was but a great mischievous baboon.

He would say, that the Europeans knew not how to order or govern our woemen, and that the Turks were the only people [who] used them wisely.

He had been physitian to the Lord Ch. Bacon, whom he esteemed much for his witt and style, but would not allow him to be a great philosopher, Said he to me, "He writes philosophy like a Ld. Chancellor," speaking in derision.*

About 1649, he travelled again into Italy, Dr. George, now Sir John Ent, then accompanying him.

At Oxford he grew acquainted with Dr. Charles Scarborough, then a young physician, (since by Ch. II. knighted) in whose conversation he much delighted; and whereas before he marched up and downe with the army, he took him to him and made him ly in his chamber, and said to him, "Prithee leave off thy gunning, and stay here, I will bring thee into practice." For twenty years before he dyed, he took no manner of care about his worldly concerns, but his brother Eliab, who was a very wise and prudent manager, ordered all not only faithfully, but better than he could have done for himself. He was, as all the rest of the brothers, very cholerique, and in his young-

* This must relate to Bacon's physiological opinions as exemplified in his *Historia Vitæ & Mortis*, the work which produced so much wit in the Tristram Shandy, concerning radical heat and radical moisture. Harvey's mode of inquiry was exactly such as Bacon pointed out in his Nov. Organum. But it must be admitted, that Bacon's only physiological work savours much of precedents, in the Lord Chancellor style.—Edit.

er days wore a dagger (as the fashion then was, nay I remember my old schoolmaster, Mr. Latimer, at seventy, wore a dudgeon, with a knife and bodkin, as also my old grandfather, Lyte, and Alderman Whitson, of Bristowe, wch. I suppose was the common fashion in their young dayes,) but this Dr. would be apt to drawe out his dagger upon every slight occasion.

He was not tall, but of the lowest stature, round faced, olivaster (like wainseott) complexion; little eie, round, very black, full of spirit; his haire was black as a raven, but quite white twenty years before he dyed.

I first sawe him at Oxford, 1642, after Edgehill fight, but was then too young to be acquainted with so great a doctor. I remember he came severall times to our Coll. (Trin.) to George Bathurst, B. D., who had a hen to hatch egges in his chamber, which they daily opened to see the progress and way of generation. I had not the honor to be acquainted [with] him till 1651, being my cos. Montague's physician and friend. I was at that time bound for Italy, (but to my great grief dissuaded by my mother's importunity.) He was very communicative and willing to instruct any that were modest and respectfull to him. And in order to my journey, dictated to me what to see, what company to keep, what bookes to read, how to manage my studyes; in short, he bid me go to the fountaine head, and read Aristotle, Cicero, Avicenna, and did call the neoteriques s . . t breeches. He wrote a very bad hand, which with use I could pretty well read. I have heard him say, that after his booke of the Circulation of the Blood came out, he fell mightily in his practice, and 'twas believed by the vulgar, that he was cracked-brained; and all the physitians were against his opinion, and envyed him; with much adoe at last in about twenty or thirty yeares time, it was received in all the universities in the world, and, as Mr. Hobbes sayes in his book, "De Corpore," he is the only man, perhaps, that ever lived to see his owne doctrine established in his life-time.

He understood Greek and Latin pretty well, but was no critique, and he wrote very bad Latin. The *Circuitus Sanguinis* was, as I take it, donne into Latin by Sir George Ent, as also his booke de *Generatione Animalium*, but a little book in 12mo. against Riolan (I thinke) wherein he makes out his doctrine clearer, was writt by himselfe, and that, as I take it, at Oxford.

His Maj. K. Cha. I. gave him the wardenship of Merton Colledge, as a reward for his service, but the times suffered him not to receive or enjoy any benefit of it.

He was physitian and a great favorite of the Lord High Marshall of England, Tho. Howard, Earl of Arundel and Surrey, with whom he travelled as his physitian in his ambassade to the Emperor —, at Vienna, Ao. Dni. 163—. Mr. Hollar (who has then one of his excellencie's gentlemen) told me that in his voyage, he would still be making of excursions into the woods, making observations of strange trees and plants, earths, &c., and sometimes like to be lost. So that my Lord Ambassador would be really angry with him, for there was not only danger of thieves but also of wild beasts.

He was much and often troubled with the gout, and his way of cure was thus : he would then sitt with his legges bare, if it were frost, on the leads of Cockaine-house, putt them into a payle of water, till he was almost dead with cold, and betake himselfe to his stove, and so 'twas gone.

He was hott headed, and his thoughts working would many times keep him from sleeping : he told me, that then his way was, to rise out of his bed and walke about his chamber in his shirt, till he was pretty coole, i. e. till he began to have a horror, and then returne to his bed, and sleep very comfortably.

I remember he was wont to drink coffee, which he and his brother Eliab did, before coffee-houses were in fashion in London.

All his profession would allowe him to be an excellent anatomist, but I never heard any that admired his therapeutique way. I knew several practitioners in this towne (London) that would not have given 3d for one of his bills ; and that a man could hardly tell by one of his bills what he did aime at.

He did not care for chymistrey, and was wont to speak against them,* with undervalue.

It is now fitt, and but just, that I should endeavor to undeceive the world in a scandall, that I find strongly runnes of him, wch. I have mett amongst some learned young men, viz : that he made himselfe away, to putt himselfe out of his paine, by opium ; not but that had he labored under great paines, he had been readie enough to have donne it, I doe not deny, that it was according to his principles upon certain occasions to——, but the manner of his dyeing was really and bonâ fide thus : viz. the morning of his death, about ten o'clock he went to speake, and found he had the dead palsey in his tongue, then he saw what was to become of him, he knew there was then no hopes for his recovery, so presently sends for his young nephews to

* Sic Edit.

come up to him, to whom he gives one his watch,† to another another remembrance, &c., made sign to whom he — Sambroke, his apothecary, in Black-fryars, to lett him blood in the tongue, which did little or no good, and so he ended his dayes. His practice was not very great towards his latter end, he declined it, unlesse to a speciall friend,—e. g. my Lady Howland, who had a cancer in her breast, which he did cut off and seared, but at last she dyed of it.

He rode on horseback with a foot-cloath to visit his patients, his man following on foot, as the fashion then was, wch. was very decent, now quite discontinued. The judges rode also with their foot-cloaths to Westminster hall, wch. ended at the death of Sir Rob. Hyde, Lord Ch. Justice. Anth. E. of Shaft. would have revived [it], but several of the judges being old and ill horsemen would not agree to it. The scandal aforesaid is from Sir Charles Scarborough's sayings that he had, towards his latter end, a preparation of opium, and I know not what, which he kept in his study to take, if occasion should serve, to putt him out of his paine, and which Sir Charles promised to give him: this I believe to be true; but do not at all believe that he really did give it him. The palsey did give him an easie passeport.—*Electric Repertory*, Vol. vi., p. 107-113.—*N. O. Med. Journal*.

EDITORIAL AND MISCELLANEOUS.

Two numbers of the *Louisville Review* have been received. It is edited by Drs. Gross and Richardson, and has not been sooner noticed from the fact that, just as the first number came, we received news of the senior editor's election to the Chair of Surgery in the Jefferson Medical College; and we were not informed what, if any, change would be consequently made. The characteristic of the publication is to be, if we understand it, a series of reviews; and most of those in these numbers are of a high character. The review of the first is by the senior editor, on August Gottlieb Richter, and it is not of a character to be equalled by the same writer in every issue. That of the second is by Dr. T. S. Bell, on Trask's Prize Essay on Placenta Prævia. Dr. Miller, in this number, in a review of Storer's edition of Dr. Simpson's Obstetric Memoirs, attacks the editor, it seems to us, with more vigor than justice. Of course these

† 'Twas a minute watch, wth. wch. he made his experiments.

are not the only reviews, but we specify them as having especially attracted our attention. Original articles of the usual character also abound. One on vesico-vaginal *fistule* sets forth Dr. Bozeman's modification of suture apparatus, for which he claims great superiority over all others known. We are certain that he has been guilty of affectation in using the word *fistule*, when we have a word which answers every purpose quite as well, and a little better. *Fistula* is a legitimate English word,—all remembrance of its origin having passed away; but *fistule* is entirely French, is an intruder where it is not wanted, much less needed, and standing with *vesico-vaginal* is as much out of place as its countryman would be if we wrote of the *tres* great noise in the street. This affectation of foreign words is not worthy of Dr. B., and we are sure that as soon as this fault in his style is pointed out to him, he will take care to avoid it. Of the surgery of his article we will not now speak. Dr. Bemiss, of Louisville, has, in the second number, a very sensible article on croup, though we do not care to endorse all his opinions. It is very funny to notice how much pains he takes to shut his eyes, so that he may not see anything that Dr. Horace Green has written about the disease; but we shall break the news of it gently to the latter, and presume he will not be entirely overcome. Seriously, however, it was not quite worthy of Dr. B. to do so.

The salutatory has some very uncalled for as well as uncourteous remarks about journals in that section of the country, "which was the first to throw off the political yoke that England had placed upon our necks," accusing them of a "servile bending of the knee to the English Baal of medical criticism." As this does not hit the MONTHLY, if indeed it does any one else, we feel free to say that it seems to have been introduced to "drum up" subscribers, by sounding a rather loud trumpet, and then gently tickling them. This follows:—"We congratulate our Southern and Western brethren in their comparative freedom from this shameful idolatry, and we hope we have good reason to believe that they will never submit to its degrading influence." There was an excellent opportunity lost to introduce something about the American eagle.

Our notice of the *Review* has grown beyond all usual bounds, and chiefly because it is a very promising periodical; which, if wisely and energetically conducted, as no doubt it will be, will rank high among its compeers. Its faults are those common to new journals, and will soon wear off, and its merits will then be more apparent. As to size, if our readers put two numbers of the MONTHLY together,

it will be found that they contain twenty-four pages more than one number of the *Review*, which appears once in two months. The price is the same.

By a delay in the appearance of the MONTHLY, we are able to announce that the Chair of Anatomy, in the New York Medical College, vacated by the resignation of Dr. E. H. Parker, has been filled by the election of Dr. Timothy Childs, of Pittsfield, Mass. Prof. Childs, after a thorough professional education, to which was added service as Assistant Surgeon in the Army, lectured upon Surgery and Anatomy in the Pittsfield Medical School, with honor to himself and profit to his pupils. He will bring ability and experience to his new position in this city, for which we believe he is very well qualified, and to which we shall cordially welcome him. The New York Medical College is thus again fully equipped, and prepared for the Winter campaign; and will, without doubt, continue to meet with the same success that has heretofore marked its progress.

We have been particularly requested to insert the following:—

“At a meeting of the Board of Trustees of the ‘New York Medical College,’ held on the 5th inst., on motion, it was unanimously Resolved, That in accepting the resignation of Prof. E. H. Parker, M. D., of the Chair of Anatomy in the ‘New York Medical College,’ the Trustees desire to express their regret that the engagements of Dr. Parker should render it necessary for him to resign the Chair which he has filled with great credit to himself, and with entire satisfaction to this Board, and to his colleagues of the ‘New York Medical College.’”

Our New Jersey neighbor compared himself some time since to an oxy hydrogen blowpipe. The comparison would have seemed to be rather a doubtful compliment, if made by any one else. New York and Philadelphia were to be the grand reservoirs, and all bystanders expected to have their eyes put out by the illumination. We have kept our own carefully shaded, and so have preserved our vision. Our New York gas (we do not know whether it is oxygen or hydrogen, or some other “gen,”) is communicated in letters signed “J. Gotham, Jr.” The correspondent quotes, in the July number, the results of Dr. J. H. Griscom’s treatment of twenty-six cases of acute

rheumatism by the alkaline method. None went over four weeks before they were cured, and the shortest case was five days. The average duration of the cases, after they came under treatment, was about thirteen days. The treatment is thus described :—"Almost immediately after admission, the sup. tart. pot. et soda was administered in doses of one drachm, repeated every hour, and an alkaline anodyne lotion of carb. potas. and tinct. opii applied locally on the swelled joints. This treatment was preceded by such alteratives and evacuants as each case appeared to require. With the improvement of the patient the medicine was administered less frequently—say every two, three, or four hours. It is remarked that purgation rarely followed the use of the salt, though when it did, its action was restrained by the addition of a few drops of tinct. opii. When the pains were very severe at night, pulv. Doveri, or some other form of opiate was given." The report adds : "Under the most approved plans of treatment heretofore, the duration of a severe attack of rheumatism has rarely been less than six weeks. One of the most happy circumstances attending the alkaline treatment, is the freedom from cardiac and other complications, so frequent under ordinary circumstances."

As these letters bear strong internal evidence of having been written by Dr. John H. Griseom himself, we may consider this statement of success as by authority.

A New Instrument for the Treatment of Retroflexion and Antelexion of the Uterus.—Prof. E. R. Peaslee has invented an instrument for the above-mentioned displacements of the uterus, which he has found to be quite successful. It is constructed upon an entirely *new principle*; so that the intra-uterine portion alone is first applied, and the other portions are adapted to this subsequently. We expect soon to be able to give our readers a full description of the instrument, and of the manner of its application.

The Angers journals speak of Doctor Emile Renaut, of Beaufort, as having shown great devotion and praiseworthy courage. During three consecutive days and nights he did not get out of the boat, by which he went to take, from the windows and skylights on the roofs, the unfortunate people who were surprised by the inundation. He thus saved from certain death a large number of people.—*Gaz. Hebdom.*